TRANSAS INS

(VERSION 1.11.002)

UTILITIES

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PREAMBLE

This chapter provides general information for the work with document.

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ANNOTATION

The purposes of this book is to provide the user with an idea about interfaces and operating principles of Transas INS utilities and give the guidelines in the solution of various tasks, which may arise during utilities handling.

LIST OF DOCUMENTS

Transas INS (v. 1.11.002). Installation Guide.

Transas INS (v. 1.11.002). Functional Description.

Transas INS (v. 1.11.002). ECDIS.

Transas INS (v. 1.11.002). Radar.

Transas INS (v. 1.11.002). Utilities.

LIST OF ABBREVIATIONS

- ASCII – American Standard Code for Information Interchange;
- AUX – Auxiliary;
- CA – Chart Assistant;
- CM – Cart Manager;
- DGPS – Differential Global Positioning System;
- ECDIS – Electronic Chart Display and Information System;
- ENC – Electronic Navigational Chart;
- IEC – International Electrotechnical Commission;
- HO – Hydrographical Office;
- IMO – International Maritime Organisation;
- INFO – Information;
- MNS – Marine Navigation Systems;
- N/A – Not available;
- NMEA – National Marine Electronics Association;
- NS – Navi-Sailor;
- RNC – Raster Navigational Chart;
- SENC – System Electronic Navigational Chart;
- WF – Word Folio.

PRINTING HOUSE CONVENTIONS

Sample of notation	Usage comments
TRANSAS INS (V. 1.11.002). INSTALLATION GUIDE	To highlight names of documents
Chart Assistant Adjustment	To highlight sections of a document
Internal collection	To highlight, in a printed document, user interface elements and the utilities system objects
START\STOP	To highlight menu items
<Enter>	To highlight names of keyboard keys
“Next”	To highlight names of windows, pages, buttons, etc.
`Update47_WF21.exe`	To highlight messages, commands, files and other Windows OS information
CA_Inbox	To highlight path to a file, folder

CHAPTER 1

Description of Chart Assistant Utility

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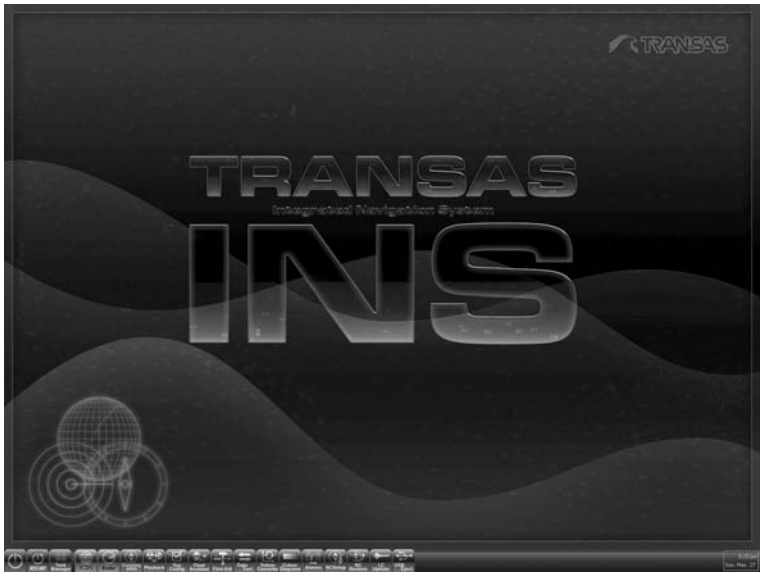
SOFTWARE DESCRIPTION

Purpose

Chart Assistant (CA) utility allows the following tasks to be accomplished:

- to order, receive, install and display a catalogue of TX-97 and ENC format charts;
- to order and receive TX-97 and ENC format charts and their updating on the basis of the installed chart catalogue;
- to install charts of ARCS, SEAFARER, BSB/NDI, NOS/GEO, S57/S63/SENC, TX-97 formats from various media;
- to install updating for charts of the aforementioned formats;
- to display the ship chart collection and load charts it includes;
- to display and accept chart updating (for S-57/S-63 format charts only);
- to install and update licenses for charts in the aforementioned formats;
- to equalise ship chart collection databases at all the workstations from one workstation.

Press button for run Chart Assistant utility.



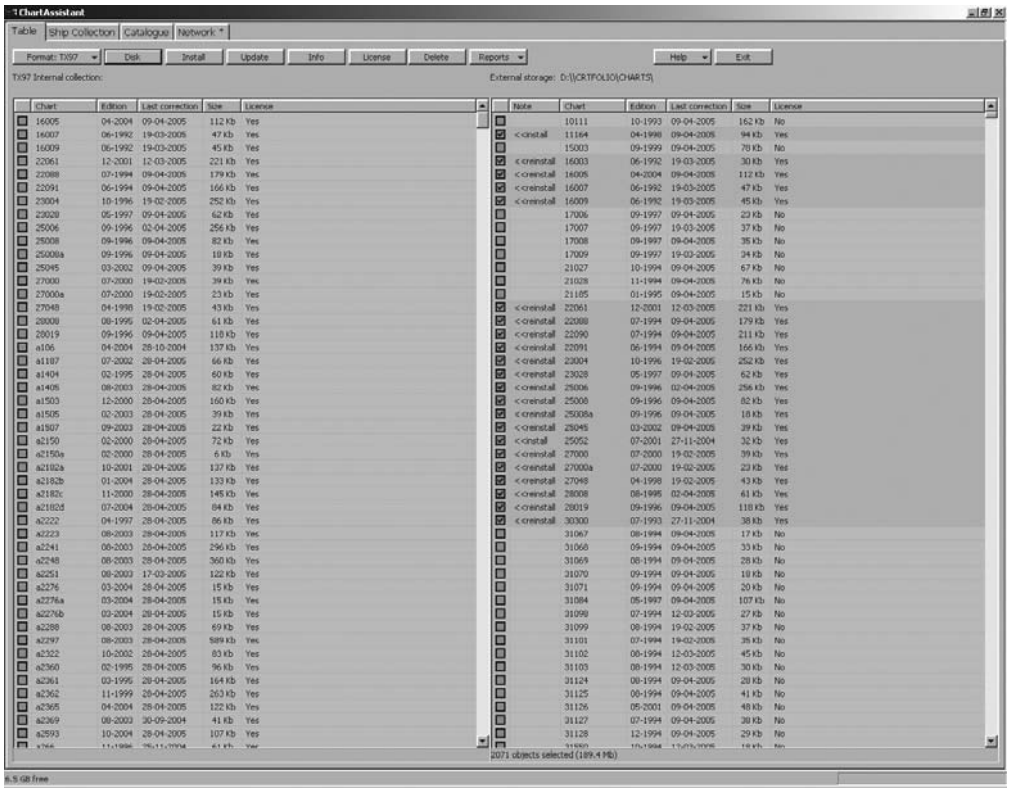
After the utility is run the screen displays a control window. The utility window consists of the following panels:

- Table;
- Ship Collection;
- Catalogue (for formats of those charts only which a catalogue is available for);
- Network.

In addition the aforementioned panels, the left bottom part of the screen constantly displays a status bar specifying the free space on the computer hard disk and the right bottom part of the screen constantly displays the cursor's coordinates in “Ship Collection” and “Catalogue” panels.

Table Panel

“Table” panel is intended for handling, in a tabular form, the ship chart collection and collection in an external storage.



“Table” panel consists of the following parts:

- Buttons Area;
- Internal collection window;
- External storage window.

Buttons Area

Buttons area contains the following buttons:

- Format – to select an active chart format;
- Disk – to scan the carrier (format of charts and data type (chart catalogues, licenses, charts and their updating) contained in an external storage is identified automatically);
- Install – to start the chart installation process;
- Update – to start the updating process for the charts of the selected format;
- Info – to obtain information on selected charts;
- License – to start the license installation procedure (including permits for TX-97, ENC and ARCS chart formats);
- Delete – to delete a selected chart or a group of charts;
- Reports – to view the archived log of operations performed on the charts and current chart collection status;
- Help – to open the “Chart Assistant” help window;
- Exit – to exit from the “Chart Assistant”.

Internal Collection Window

In the Internal collection window the data is presented as follows:

- Chart – chart name;
- Edition – chart edition in the following format:
  - edition number (for S-57 format charts);
  - edition date in yyyymm format (for the rest of the formats).
- Issue Data – the date of S-57 format chart issue (only for SENC chart format);
- Last correction – date of the most recent chart updating in dd-mm-yyyy format;
- Size – space in bytes occupied by the chart on the carrier;
- License – chart license in the following form:
  - Yes – there is a license for the chart, or the chart does not require a license;
  - No – no license for the chart;
  - yyyy.mm – effective license expiry date.
- Note – information on availability of updates for ENC format charts if there is an external storage containing ENC format charts.

External Storage Window

In the External storage window, the data is presented as follows:

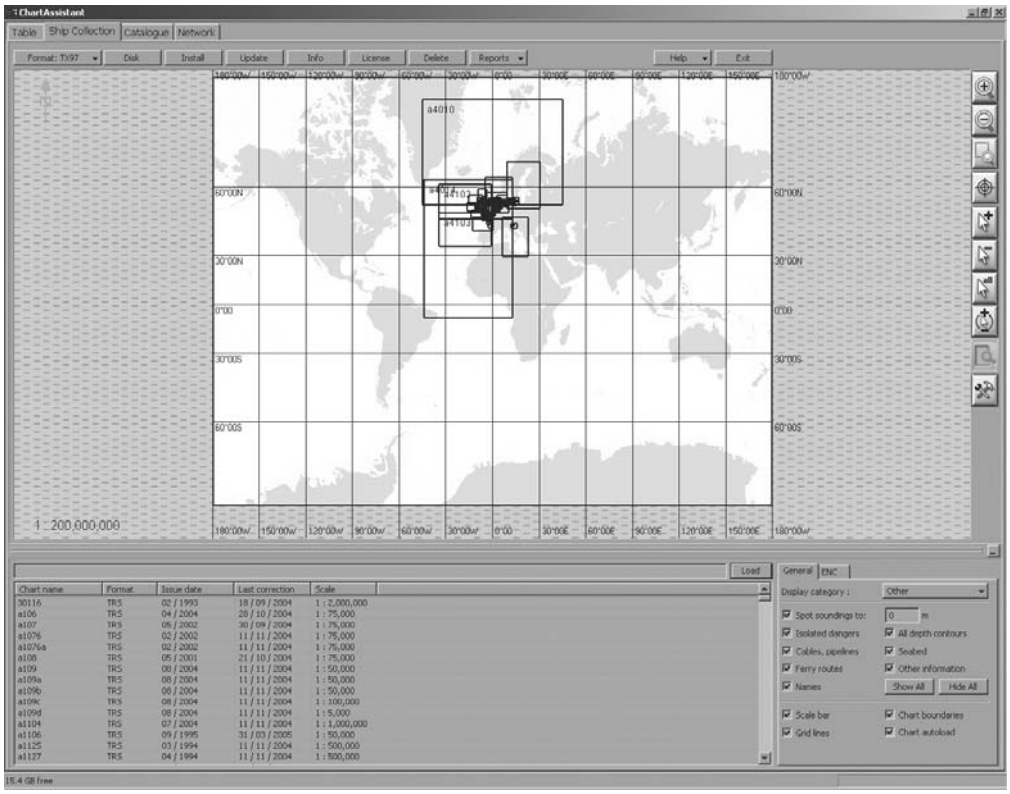
- Note – chart status designation:
  - <<Install – chart permitted for installation;
  - <<Update – chart permitted for installation, but the ship folio already contains a chart with this number if the external storage contains a newer chart;
  - <<Reinstall – chart permitted for installation, but the ship folio already contains a chart with this number if the external storage contains a chart identical to or older than that already installed;
  - empty line – chart installation is not permitted (no license).
- Chart – chart numbers;
- Edition – chart edition which can be presented in the following format:
  - edition number (for S-57 format charts);
  - edition date in yyyymm format (for the rest of the formats).
- Issue Data – the date of S-57 format chart issue (only for ENC chart format);
- Last correction – date of the most recent chart updating in dd-mm-yyyy format;
- Size – space in bytes occupied by the chart on the carrier;
- License – chart license in the following form:
  - Yes – there is a license for the chart, or the chart does not require a license;
  - No – no license for the chart;
  - yyyy.mm – effective license expiry date.
- Issue Data – the date of S-57 format chart issue.

Notation used:

- y = year;
- m = month;
- d = day.

Ship Collection Panel

“Ship Collection” panel is intended for handling an internal and external chart collections presented graphically.



“Ship Collection” panel consists of the following parts:

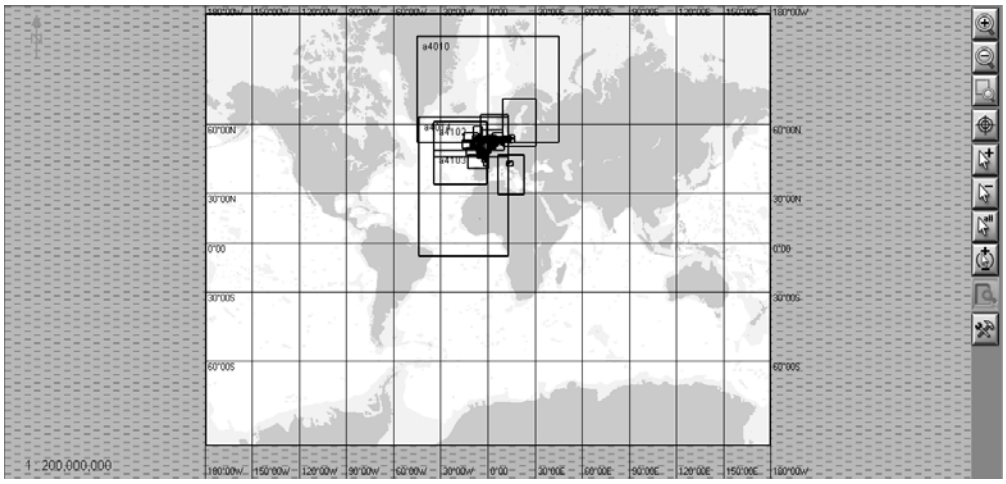
- Buttons Area;
- Charts Display Area;
- Chart Search and Loading Area;
- Chart Information Display Adjustment Area.

Buttons Area

“Ship Collection” panel buttons are identical to “Table” panel buttons and have the same purpose.

Charts Display Area

Charts Display Area is intended for the graphic presentation and selection of charts from the ship and external folio on the map-of-the-world field.



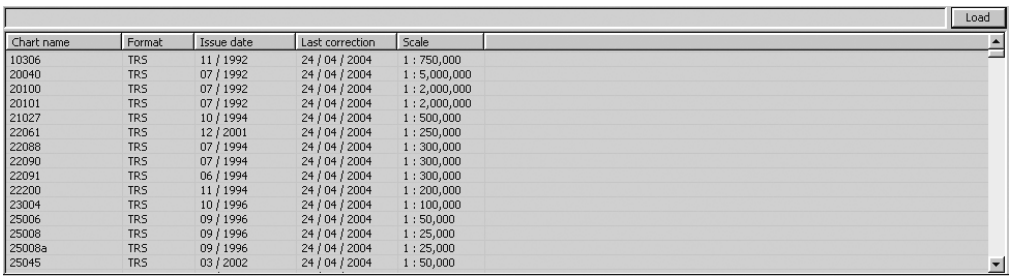
The area consists of two parts:

- Toolbar with the following functions:
  - to increase the chart display area scale;
  - to decrease the chart display area scale;
  - to zoom in with graphic cursor (rectangle form);
  - to re-draw the chart display area around the cursor (centring);
  - to select one or several charts with the graphic cursor;
  - to cancel selection of one or several charts with the graphic cursor;
  - to select all the charts of the ship collection and external storage;
  - to invert chart selection;
  - to open the window for viewing ARCS and Seafarer format charts;
  - to adjust Chart Assistant utility configuration.
- Area of graphic presentation of chart boundaries with a free cursor. Depending on the selected function, the cursors assumes the following form:
  - to re-draw the chart display area around the cursor's centre point (centring);
  - to load one of charts under the cursor;
  - ERBL – electronic range and bearing line for the measurement of distances between any two points in the chart display area;
  - to select one or several charts;
  - to cancel selection of one or several charts;
  - to whom it may concern: zoom in/out.

It is possible to switch from one cursor to another via the context menu.

Chart Loading Area

Chart loading area is intended for loading charts from the ship collection.



The area contains the following parts:

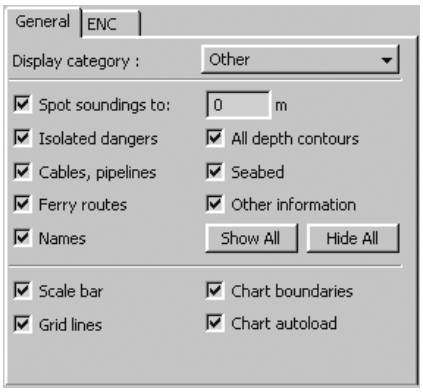
- Chart number input window;
- Manual chart selection window. Charts in the list can be sorted by the following parameters:
  - Chart name – chart name;
  - Format – chart format;
  - Issue date – chart issue date;
  - Last Correction – latest correction date;
  - Scale – chart scale.
- Load – to load display the selected chart.

Chart Information Display Adjustment Area

Chart Search and Loading Area is intended for handling the loaded charts and consists of the following pages:

- General;
- ENC.

General Page

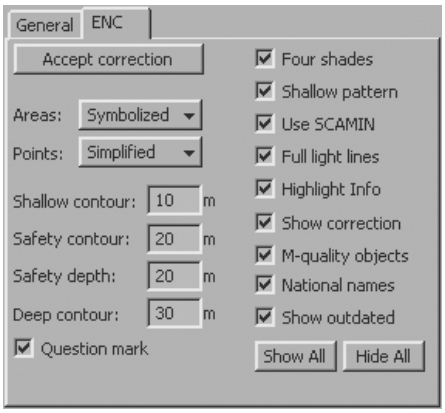


This page is intended for controlling the display of individual chart information classes by using the following controls:

- Display category – to switch presentations of different display types:
  - Base – to turn on presentation of objects included in the Base Display;
  - Standard – to turn on presentation of objects included in the Standard Display;
  - Other – to turn on presentation of objects included in the Additional Information Display at the user discretion.

- Spot soundings to – to turn on the display of depth values smaller than the setting made in the relevant window (if the setting is “0” all the soundings are displayed);
- Isolated dangers – to turn on the display of isolated dangers with depths over them larger than the safety depth;
- Cables, pipelines – to turn on the display of submerged cables and pipeline;
- Ferry routes – to turn on the display of ferry crossings;
- Names – to turn on the display of names;
- All depth contours – to turn on the display of all the depth contours;
- Seabed – to turn on the display of ground characteristics;
- Other information – to turn on the display of other information;
- Show All – to turn on the display of the aforementioned chart layers;
- Hide All – to turn off the display of the aforementioned chart layers;
- Scale bar – to turn on the display of chart scale graphic presentation (in the left-hand part of the screen);
- Grid lines – to turn on the display of the coordinate grid;
- Chart boundaries – to turn on the display of ship folio chart boundaries;
- Chart autoload – to turn on automatic chart loading.

ENC Page



This page is intended for adjusting display and handling of ENC format charts:

- Accept correction – to activate updating acceptance procedure on ENC format charts (before the acceptance correction highlighting symbols are displayed);

WARNING!

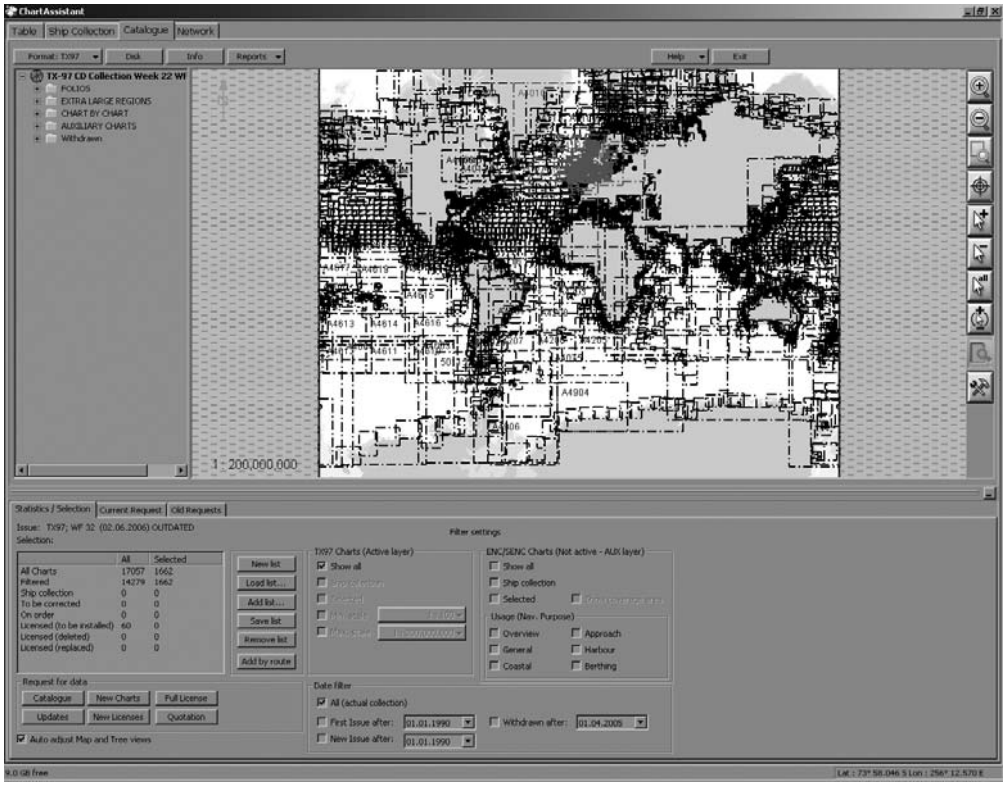
By default, the Manual Accept and Do not accept last settings are disabled during the installation, and in this case updating will be accepted automatically. (See document TRANSAS INS (V. 1.11.002). INSTALLATION GUIDE, chapter System Settings, section Chart Assistant Adjustment). It is not advisable to activate these functions.

- Areas – to select the display style for an area type object boundary, from the list (Plain and Symbolised);
- Points – to select the style of the point type object display from the list (Paper chart and Simplified);

- Shallow contour – to enter the value of the deep water contour delineating the colour highlighting of the shallow area for ENC format charts;
- Safety contour – to display the safety contour value for a vector format chart (for information only);
- Safety depth – to display the safety depth value for a vector format chart (for information only);
- Question mark – to turn on the display of objects which are not specified in S-52 standard;
- Deep contour – to enter the value of the shallow water contour delimiting the colour highlighting of the deep water area for ENC format charts;
- Four shades – to turn on the colour highlighting of the set depth areas;
- Shallow pattern – to turn on the display of hatching in the presentation of areas with depths smaller than the safety contour on ENC format charts;
- Use SCAMIN – to turn on the display of an object on scales unsuitable for its presentation (generalisation method selection);
- Full light lines – to switch the lengths of lines delimiting the light visibility sectors;
- Highlight info – to turn on the display of highlighting for objects with “Inform” attribute;
- Show correction – to turn on colour highlighting for the objects which have undergone some modification in the process of the latest accepted correction;
- M-quality objects – to turn on the display of accuracy symbols for the ship positioning and sounding during seabed contour survey on ENC format charts;
- National names – to turn on the display of national names;
- Show outdates – to turn on the display of temporary objects regardless of their effective time;
- Show All – to turn on the display of all the parameters;
- Hide All – to turn off the display of all the parameters.

Catalogue Panel

“Catalogue” panel is intended for the display of information on Transas chart collection (TX-97 and ENC/SENC formats), as well as for forming and sending orders for new chart catalogues, charts, their licenses or updating for the already installed charts.



“Catalogue” panel consists of the following parts:

- Buttons Area;
- Chart Catalogues Area;
- Charts Display Area;
- Chart Request Area.

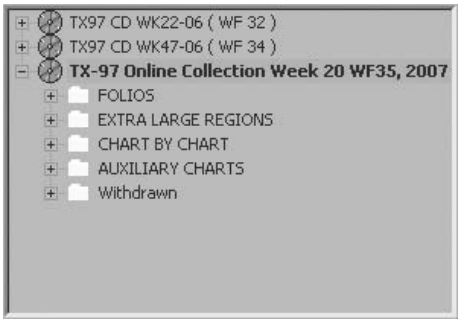
Buttons Area

Buttons area contains the following buttons:

- Format – to select the chart format;
- Disk – to scan the carrier (format of charts contained in an external storage is identified automatically);
- Info – to obtain information on charts and folio;
- Reports – to view the archived log of operations performed on the charts or chart collection status;
- Help – to open the “Chart Assistant” help window;
- Exit – to exit from the CA.

Chart Catalogues Area

Chart Catalogues Area is intended for presenting a chart catalogues in the form of a “tree”.



Charts Display Area

“Catalogue” panel’s Chart Display Area displays charts from the catalogue and ship collection, whereas the Chart Display Area of “Ship Collection” panel shows charts from the ship collection and external storage only. These areas on both panels have identical buttons.

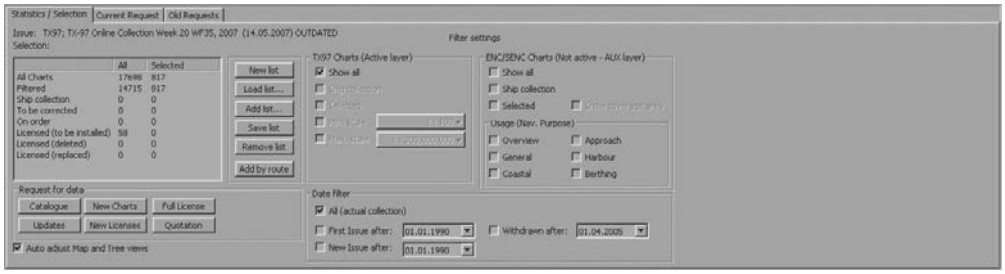
Chart Request Area

Chart request area consists of the following pages:

- Statistic/Selection;
- Current Request;
- Old Requests.

Statistic/Selection Page

“Statistic/Selection” page is intended for displaying information on the active catalogue charts and for selecting charts for the further order.



The page contains the following parts:

- TX-97 – format of charts in the installed catalogue database with the indication of the name, number and issue date; where the database is more than one week old, “OUTDATED” message is displayed;
- Selection – name of the selected chart list;
- Table with information on charts:
  - All charts – total number of charts in the installed catalogue database;
  - Filtered – number of active format charts selected with a filter from the installed catalogue (chart boundaries are shown in Chart Display Area);
  - Ship collection – number of charts in the ship collection;
  - To be corrected – number of charts in the ship collection subject to updating (on the basis of the installed catalogue data);

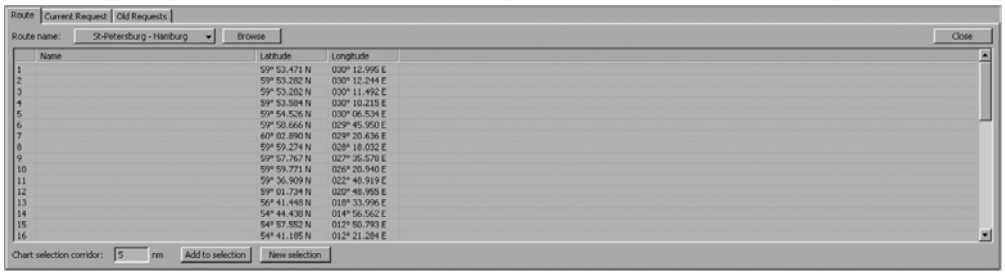
  - On order – number of charts ordered, but not yet received;
  - Licensed (to be installed) – number of charts, licensed but not yet installed;
  - Licensed (deleted) – number of installed charts which are not available in the installed catalogue (deleted from the collection);
  - Licensed (replaced) – number of installed charts which are not available in the installed catalogue, but there is an adequate replacement for them.
- Request for data– to select type of data to be ordered (after the selection, "Data Request" page is automatically switched to):
  - Catalogue;
  - New Charts;
  - Updates;
  - New Licenses;
  - Full License;
  - Quotation.
- Auto adjust Map and Tree views – to turn on/off equalising of chart selection in Chart Display Area and Chart Catalogues Area;
- New list – to form a new list of charts (the previously made selection is cancelled);
- Load list – to load a list of charts from the external storage (the previously made chart selection is cancelled);
- Add list – to load a list of charts from an external storage as an addition to the list of already selected charts;
- Save list – to save a list of charts in the external storage;
- Remove list – to delete, from the selected chart list, a list of charts from the external storage (operation reverse to Add list);
- Add by route – to make up a list of charts along the route. A press on this button opens "Route" page (see below);
- Filter settings – to set filters for charts in various formats:
  - TX97 Charts (Active layer) to turn on/off the display of the following TX-97 format charts (notation in the brackets indicates if this is an active or inactive format):

    Show all – all the charts of the selected catalogue folder;
    Ships collection – ship chart collection;
    Selected – selected charts;
    Min scale – charts on scales smaller than the set one;
    Max scale – charts on the scale larger than the set one.
  - ENC/SENC (Not active – AUX layer) to turn on/off the display of the following ENC/SENC format charts (notation in the brackets indicates if this is an active or inactive format):

    Show all – all the charts of the catalogue;
    Ships collection – ship chart collection;
    Selected – selected charts;
    Show coverage area – area covered with data SENC charts;
    Usage (Nav. Purpose) – certain navigational purpose.
  - Date filter – to turn on/off display of the following charts:

    All (actual collection) – all the charts in the collection;
    First issue after – charts issued for the first time after the specified date;
    New issue after – charts whose new editions has appeared, or which have been updated after the specified date;
    Withdrawn after – charts withdrawn from circulation after the specified date.

When a list of charts along the route is formed, “Route” page opens up.

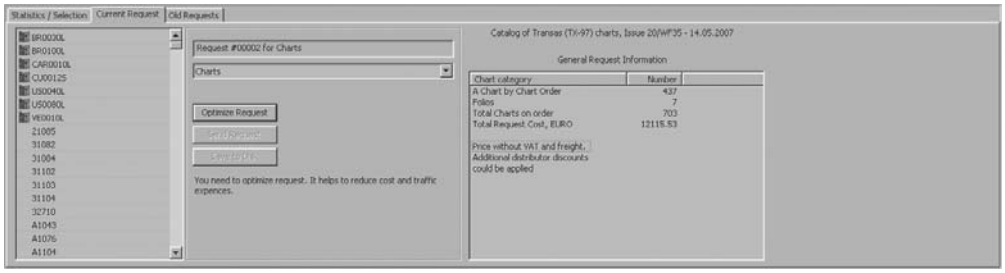


The page contains the following parts:

- Route name – to load a route by the name selected from the list of routes created and stored in the ECDIS task or from the folder specified by the user with the aid of the “Browse” button;
- Chart selection corridor – to set the width of the corridor along the route for the chart selection;
- Add to selection – to add a list of charts along the route to the list of already selected charts;
- New selection – to form a new list of charts based on the list of charts along the route (cancels the previously made selection);
- Close – to close “Route” page and return the display of standard “Statistic/Selection” page.

Current Request Page

“Current Request” page is intended for forming an order, viewing information on this order, and sending it.

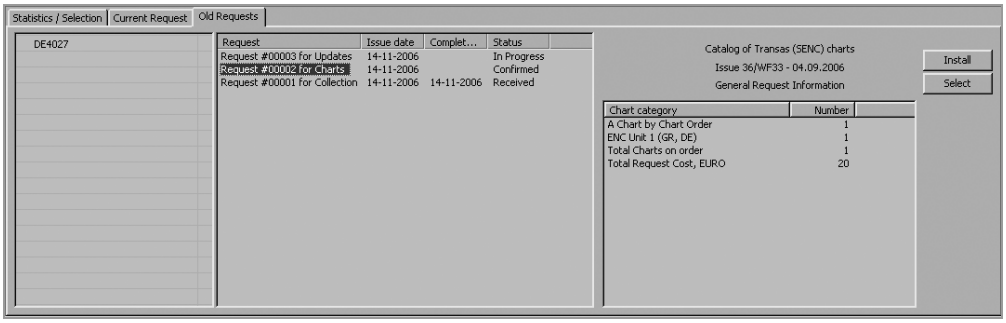


The page contains the following parts:

- table with folios and charts selected for the order;
- number of the order;
- selection of data type for the order;
- Optimize Request – to optimise the order;
- Send Request – to send the order;
- Save to Disk – to save the order;
- name, number and issue date of the catalogue which the order was formed on the basis of;
- General Request Information:
  - number of charts as per the price list items;
  - total charts on order;
  - total request cost;
  - warning that a tentative price has been provided.

Old Requests Page

"Old Request" page is intended for storing information on the orders made.

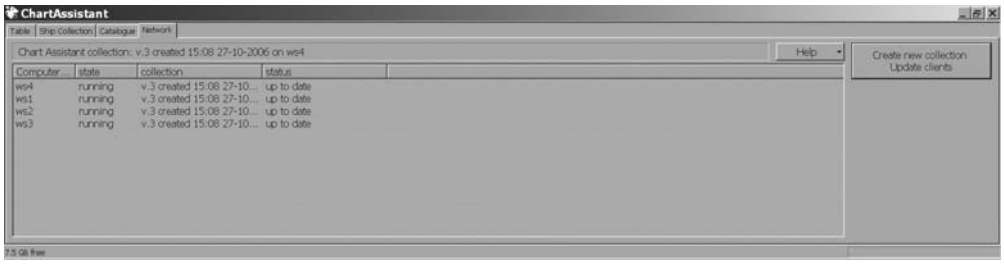


The page contains the following parts:

- table with folios and charts included in the selected order;
- table with orders made, which includes the following columns:
  - Request – name of the order which includes its number, date, order formation time and the type of ordered data;
  - Issue date – order formation date;
  - Complete date – order reception date;
  - Status – order status.
- name, number and issue date of the catalogue which the order was formed on the basis of;
- reference information on the order;
- Install – to install data received in the selected data (unless it was installed after the reception of the order);
- Select – to select data contained in the order for the formation of a new order.

Network Panel

"Network" panel is intended for equalising the ship chart collection databases at all the tasks and WS.



"Network" panel consists of the following parts:

- Information line which shows:
  - latest version of the actual ship chart collection;
  - its creation date and time;
  - name of the workstation where it was created.

Note: "*" mark indicates that the chart collection in the CA is modified as compared to the chart collection currently in use in the INS.

- Table of chart collections at the workstation is presented in the following form:
  - Computer name – workstation name;
  - State – workstation status (running or N/A);
  - Collection – version number, creation date/time and name of the workstation where the chart collection installed at the workstation in question, was created;
  - Status – collection status relative to the actual chart collection.
- Create new collection/Update clients – to equalise chart collections at the workstations.

OPERATING PRINCIPLES

Chart Formats

Raster and vector forms of data presentation have their benefits and disadvantages. The advantage of the raster form is the easiness of data production reduced to the organization of source paper chart scanning and presentation of raster data in compliance with specifications. The greatest drawback of raster data is the impossibility to activate signals and alarms in the shipboard display system as the ship is crossing a distinctive depth contour or the boundary of a dangerous area. Also noted is the impossibility to change the display scale, distortion of presentation if the scanner and screen resolution differ, which makes the chart considerably less easy to handle.

Unlike the raster charts, which are called “mute”, vector charts are “intelligent”. Indeed, they allow the safety of navigation to be considerably improved owing to the signal and alarm generation capability. They carry significantly more information, as for any element of navigational situation, the navigator can obtain exhaustive information, which is contained in the vector data in the form of object attribute values. It is only natural that the production of vector data should take much more time and cost.

Data in Vector Form

TX-97 (TRS) Charts

TX-97 Standard

The data in the vector form is produced both, by the national hydrographic offices and by private companies. The status of this data is naturally different. When using the non-official TX-97 vector data produced by Transas Ltd., the navigator is warned about the fact that the hydrographic office is not responsible for the data quality and, to ensure the safety of navigation, it is necessary to use a fully updated paper navigational chart.

Vector TX-97 data is produced in accordance with Transas standard. The standard provides for the unity of data and its format not only in the vector data production system, but also in the shipboard chart display systems, which are also produced by the company. The TX-97 vector data is actually system ENC for the ECDIS manufactured by Transas Ltd. Production of TX-97 data is organised in accordance with ISO 9001 quality assurance standard.

TX-97 Chart Display

The chart is reproduced on the monitor screen from the SENC data in the following way. For each point type object, a certain symbol of the required size and colour is selected from the symbol library by its code and attribute values, and is displayed in the point with the specified coordinates. For each line type object, a line of the certain style and colour is selected by its code and attribute values. Its coordinates determine the line's position. Area infills are of the same colour as those used in the printing of paper charts. The chart is easy to read for the navigator. The set of symbols, lines and filled in areas specified by the TX-97 standard generates a chart image, which the navigator sees on the screen.

Production of TX-97(TRS) Charts

Using two technologies produces the TX-97 data. Vectorising technology is used in the production of TX-97 data based on the paper chart. The data is not produced until the conclusion of an agreement with the HO, which holds the copyright for the paper chart.

The conversion technology enables official ENC data to be converted to the TX-97 vector data. In the process of conversion, all the information required for ensuring safety of navigation is fully reproduced. Data conversion is also carried out after the conclusion of an agreement with the HO, which holds the copyright for ENC data. The further data display is in accordance with the TX-97 standard.

ENC Vector Charts Converted to TX-97 Format

The conversion technology enables official ENC data to be converted to the TX-97 vector data. In the process of conversion, all the information required for ensuring safety of navigation is fully reproduced. Data conversion is also carried out after the conclusion of an agreement with the HO, which holds the copyright for ENC data. The further data display is in accordance with TX-97 standard.

Data Processing Principles and Log of Operations on TX-97 Chart Collection

Information on the work with the chart folio is important; this is why Chart Assistant utility features a capability to create a number of logs after the operations on charts. There are the following types of logs:

- General log. A general log for the ENC format charts is generated by the CA after any operation on the chart folio:
  - installation;

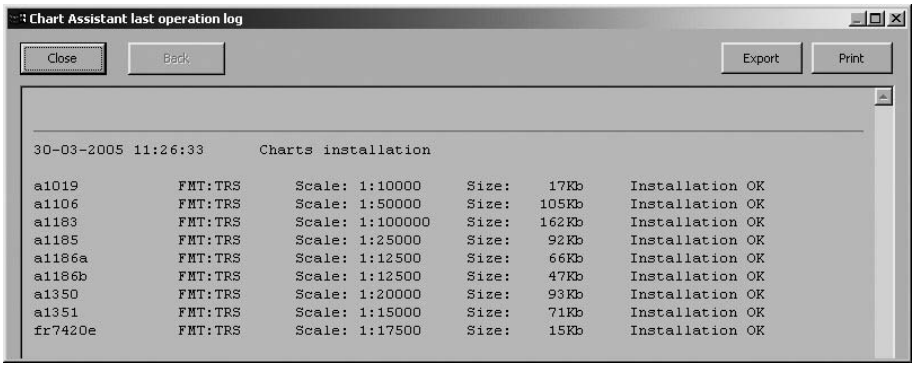


Chart Assistant last operation log
Close
Back
Export
Print
30-03-2005 11:26:33 Charts installation
a1019 FMT:TRS Scale: 1:10000 Size: 17Kb Installation OK
a1106 FMT:TRS Scale: 1:50000 Size: 105Kb Installation OK
a1183 FMT:TRS Scale: 1:100000 Size: 162Kb Installation OK
a1185 FMT:TRS Scale: 1:25000 Size: 92Kb Installation OK
a1186a FMT:TRS Scale: 1:12500 Size: 66Kb Installation OK
a1186b FMT:TRS Scale: 1:12500 Size: 47Kb Installation OK
a1350 FMT:TRS Scale: 1:20000 Size: 93Kb Installation OK
a1351 FMT:TRS Scale: 1:15000 Size: 71Kb Installation OK
fr7420e FMT:TRS Scale: 1:17500 Size: 15Kb Installation OK

– updating;

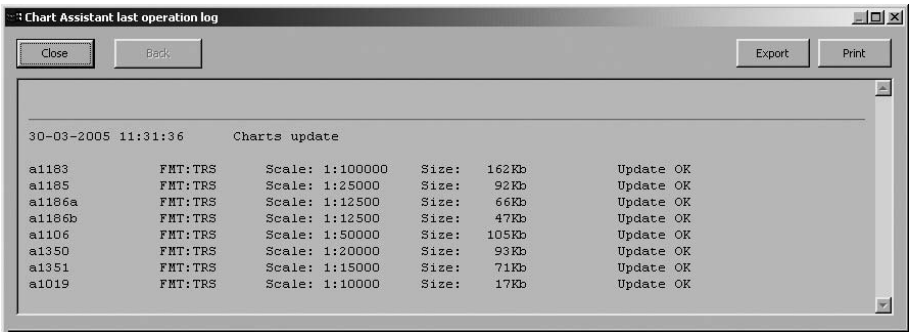


Chart Assistant last operation log
Close
Back
Export
Print
30-03-2005 11:31:36 Charts update
a1183 FMT:TRS Scale: 1:100000 Size: 162Kb Update OK
a1185 FMT:TRS Scale: 1:25000 Size: 92Kb Update OK
a1186a FMT:TRS Scale: 1:12500 Size: 66Kb Update OK
a1186b FMT:TRS Scale: 1:12500 Size: 47Kb Update OK
a1106 FMT:TRS Scale: 1:50000 Size: 105Kb Update OK
a1350 FMT:TRS Scale: 1:20000 Size: 93Kb Update OK
a1351 FMT:TRS Scale: 1:15000 Size: 71Kb Update OK
a1019 FMT:TRS Scale: 1:10000 Size: 17Kb Update OK

– deleting.

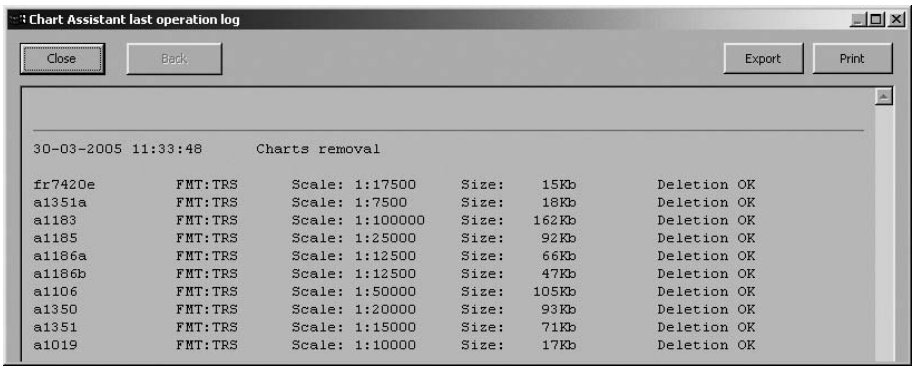


Chart Assistant last operation log
Close
Back
Export
Print
30-03-2005 11:33:48 Charts removal
fr7420e FMT:TRS Scale: 1:17500 Size: 15Kb Deletion OK
a1351a FMT:TRS Scale: 1:7500 Size: 18Kb Deletion OK
a1183 FMT:TRS Scale: 1:100000 Size: 162Kb Deletion OK
a1185 FMT:TRS Scale: 1:25000 Size: 92Kb Deletion OK
a1186a FMT:TRS Scale: 1:12500 Size: 66Kb Deletion OK
a1186b FMT:TRS Scale: 1:12500 Size: 47Kb Deletion OK
a1106 FMT:TRS Scale: 1:50000 Size: 105Kb Deletion OK
a1350 FMT:TRS Scale: 1:20000 Size: 93Kb Deletion OK
a1351 FMT:TRS Scale: 1:15000 Size: 71Kb Deletion OK
a1019 FMT:TRS Scale: 1:10000 Size: 17Kb Deletion OK

- Archive log. An archive log of certain format charts is called by pressing Reports button on “Table”, “Ship Collection”, or “Catalogue” panels of the CA. This log contains information on the completed operations similar to the information in general log generated for the given format but recorded onto the computer hard disk.

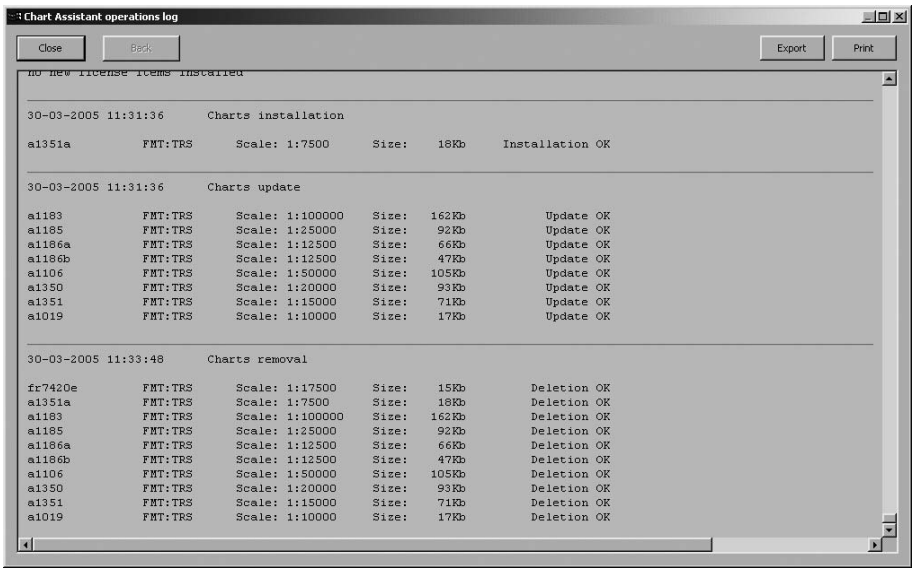


Chart Assistant operations log
Close
Back
Export
Print
30-03-2005 11:31:36 Charts installation
a1351a FMT:TRS Scale: 1:7500 Size: 18Kb Installation OK
30-03-2005 11:31:36 Charts update
a1183 FMT:TRS Scale: 1:100000 Size: 162Kb Update OK
a1185 FMT:TRS Scale: 1:25000 Size: 92Kb Update OK
a1186a FMT:TRS Scale: 1:12500 Size: 66Kb Update OK
a1186b FMT:TRS Scale: 1:12500 Size: 47Kb Update OK
a1106 FMT:TRS Scale: 1:50000 Size: 105Kb Update OK
a1350 FMT:TRS Scale: 1:20000 Size: 93Kb Update OK
a1351 FMT:TRS Scale: 1:15000 Size: 71Kb Update OK
a1019 FMT:TRS Scale: 1:10000 Size: 17Kb Update OK
30-03-2005 11:33:48 Charts removal
fr7420e FMT:TRS Scale: 1:17500 Size: 15Kb Deletion OK
a1351a FMT:TRS Scale: 1:7500 Size: 18Kb Deletion OK
a1183 FMT:TRS Scale: 1:100000 Size: 162Kb Deletion OK
a1185 FMT:TRS Scale: 1:25000 Size: 92Kb Deletion OK
a1186a FMT:TRS Scale: 1:12500 Size: 66Kb Deletion OK
a1186b FMT:TRS Scale: 1:12500 Size: 47Kb Deletion OK
a1106 FMT:TRS Scale: 1:50000 Size: 105Kb Deletion OK
a1350 FMT:TRS Scale: 1:20000 Size: 93Kb Deletion OK
a1351 FMT:TRS Scale: 1:15000 Size: 71Kb Deletion OK
a1019 FMT:TRS Scale: 1:10000 Size: 17Kb Deletion OK

ENC Charts (S-52 Presentation)

S-57 Standard

For the data presentation in the vector form, the International Hydrographic Organisation has adopted S-57 standard. The format of the vector form data produced in compliance with S-57 standard is determined by ISO/IEC 8211 standard. You can sometimes hear the term “DX-90 format”. In fact, the DX-90 is the name of the concept adopted in 1990 for the transfer of digital data in the vector form as a data exchange file as specified in ISO/IEC 8211 standard. The use of the name DX-90 is currently discouraged.

S-57 standard is being permanently improved. The second version (S-57 Version 2.0) was modernized, and in 1996 the third edition of the standard was issued (S-57 Edition 3.0). Unlike the second edition, it included the binary presentation of the format along with the existing ASCII codes. The number of objects was also changed due to their status transfer to the attributes. To enable the manufacturers to develop the software and hardware, the third edition was frozen for four years. In November 2000, the next edition (S-57 Edition 3.1) was officially introduces. The currently circulating electronic charts of various editions, from 2.0 to 3.1 of the S-57 Standard, are read and supported by the INS chart system.

S-57 Data Processing Principles

The (S-57) vector data serves for the transfer from one computer to another only. This data is referred to as the electronic navigational chart (ENC), which represents the database describing navigational situation in a particular geographic area. The data, which has been supplied to the ship is converted and presented in the form convenient for the operation of the INS. It is not only the structure, which is converted, but also the data format. Owing to this kind of conversion, the system operation efficiency is significantly enhanced. The database obtained as the result of the conversion, is called the system ENC (SENC). The SENC content is in no way different from that of the source ENC produced by the HO.

The set of data arriving on the ship necessarily contains `CATALOG.030` or `CATALOG.031` file. Specified in this file is the data on all the files included in the data set: on the main cell files, cell updating files as well as on the text and graphic files. E.g. for each file of the main cell, the data set specifies coordinates of two parallels and two meridians, which form the boundaries of this cell. `CATALOG.030` (`CATALOG.031`) file also contains means for checking correctness of the vector data transfer. If the checksum, which is formed during the reading of the main cell file in the chart system, matches the checksum in `CATALOG.030` (`CATALOG.031`) file, the data transfer is performed correctly. Otherwise, the correctness of the transferred data is not guaranteed.

Data Processing Principles and Log of Operations on S-57 Chart Collection

Information on the work with the chart folio is important, this is why Chart Assistant utility features a capability to create a number of logs after the operations on charts. There are the following types of logs:

- General log. A general log for the ENC format charts is generated by the CA after any operation on the chart folio:
  - installation;

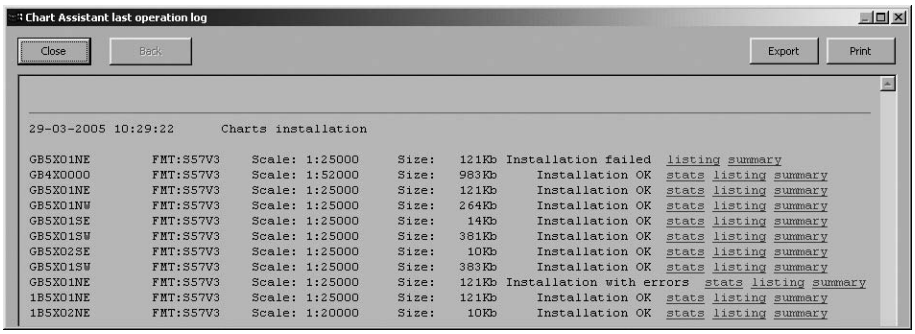


Chart Assistant last operation log
Close
Back
Export
Print
29-03-2005 10:29:22 Charts installation
GB5X01NE FMT:S57V3 Scale: 1:25000 Size: 121Kb Installation failed listing summary
GB4X0000 FMT:S57V3 Scale: 1:52000 Size: 983Kb Installation OK stats listing summary
GB5X01NE FMT:S57V3 Scale: 1:25000 Size: 121Kb Installation OK stats listing summary
GB5X01NW FMT:S57V3 Scale: 1:25000 Size: 264Kb Installation OK stats listing summary
GB5X01SE FMT:S57V3 Scale: 1:25000 Size: 14Kb Installation OK stats listing summary
GB5X01SW FMT:S57V3 Scale: 1:25000 Size: 381Kb Installation OK stats listing summary
GB5X02SE FMT:S57V3 Scale: 1:25000 Size: 10Kb Installation OK stats listing summary
GB5X01SW FMT:S57V3 Scale: 1:25000 Size: 383Kb Installation OK stats listing summary
GB5X01NE FMT:S57V3 Scale: 1:25000 Size: 121Kb Installation with errors stats listing summary
1B5X01NE FMT:S57V3 Scale: 1:25000 Size: 121Kb Installation OK stats listing summary
1B5X02NE FMT:S57V3 Scale: 1:20000 Size: 10Kb Installation OK stats listing summary

  - updating;

  - deleting.

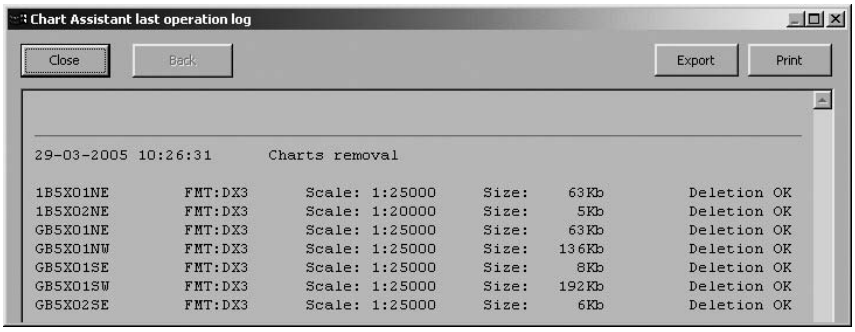


Chart Assistant last operation log
Close
Back
Export
Print
29-03-2005 10:26:31 Charts removal
1B5X01NE FMT:DX3 Scale: 1:25000 Size: 63Kb Deletion OK
1B5X02NE FMT:DX3 Scale: 1:20000 Size: 5Kb Deletion OK
GB5X01NE FMT:DX3 Scale: 1:25000 Size: 63Kb Deletion OK
GB5X01NW FMT:DX3 Scale: 1:25000 Size: 136Kb Deletion OK
GB5X01SE FMT:DX3 Scale: 1:25000 Size: 8Kb Deletion OK
GB5X01SW FMT:DX3 Scale: 1:25000 Size: 192Kb Deletion OK
GB5X02SE FMT:DX3 Scale: 1:25000 Size: 6Kb Deletion OK

- Conversion log. During the conversion of ENC charts into the internal format (SENC), special archive conversion log files are created.

  The viewing of logs is enabled by Reports button. Conversion logs can be provided in 3 forms:

  - file with `*.html` extension (called by pressing “listing” link) contains detailed description of all the non-compliances in the ENC standard terms identified in the process of conversion;

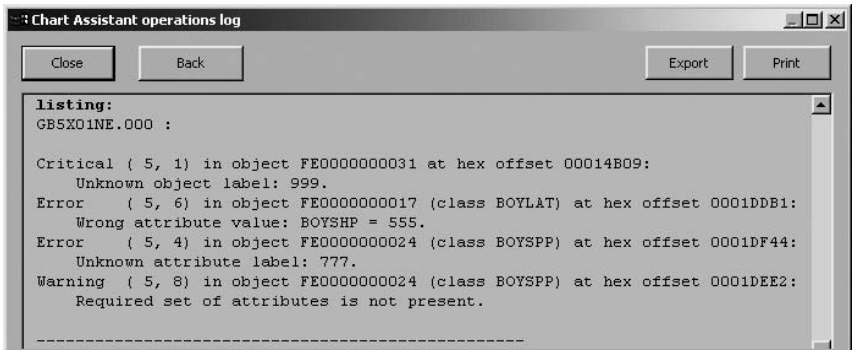
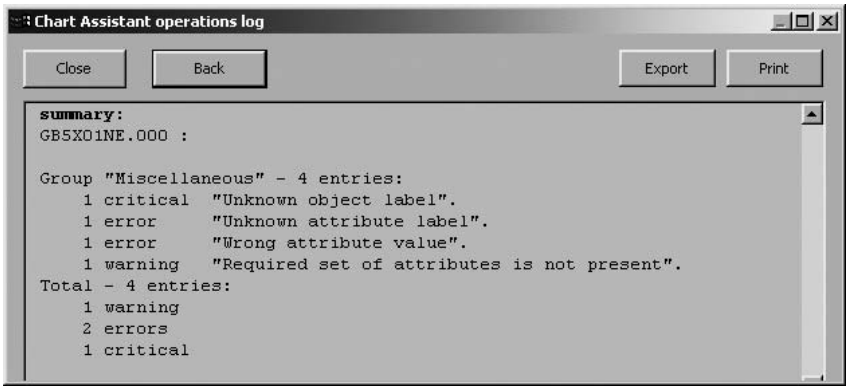


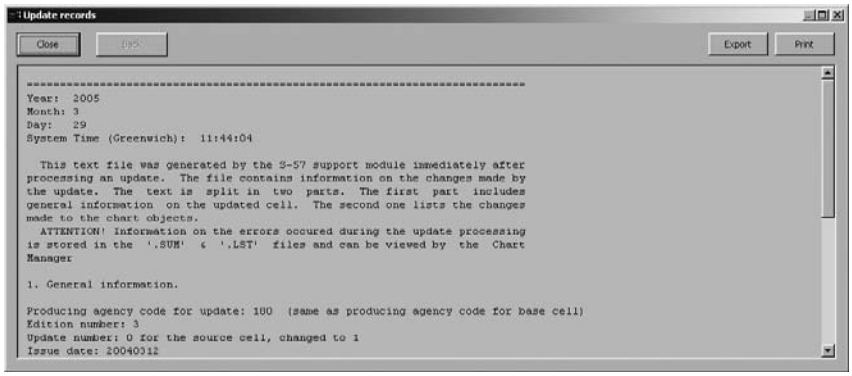
Chart Assistant operations log
Close
Back
Export
Print
listing:
GB5X01NE.000 :
Critical (5, 1) in object FE0000000031 at hex offset 00014B09:
Unknown object label: 999.
Error (5, 6) in object FE0000000017 (class BOYLAT) at hex offset 0001DDB1:
Wrong attribute value: BOYSHP = 555.
Error (5, 4) in object FE0000000024 (class BOYSPP) at hex offset 0001DF44:
Unknown attribute label: 777.
Warning (5, 8) in object FE0000000024 (class BOYSPP) at hex offset 0001DEE2:
Required set of attributes is not present.

– file with `*.html` extension (called by pressing “summary” link) extension contains summary information on the non-compliances identified in the process of conversion, in the form of the number of errors in the data groups. These files are created during the conversion of those charts which “Installed (there are errors)” or “Installed (there are records)” messages are available for in the general log. “There are errors” entry implies “Critical” and “Fatal” type errors, which is associated with the loss of data. In case of “Warning” and “Error” type errors, “there are records” message is displayed, which means the presence of minor errors, which do not affect the display of chart information.



Information contained in listing and summary files is of service character and is not intended for use for the navigational purposes:

– file with `*.html` extension (called by pressing “update records” link) is provided in the form of a text file and contains information on the completed updating of ENC (SENC) format charts in the form clear for the navigator. For the convenience sake, information is arranged in the order reverse to chronological, and can be used as reference information.


Update records
Close
Export
Print
Year: 2005
Month: 3
Day: 29
System Time (Greenwich): 11:44:04
This text file was generated by the S-57 support module immediately after processing an update. The file contains information on the changes made by the update. The text is split in two parts. The first part includes general information on the updated cell. The second one lists the changes made to the chart objects.
ATTENTION! Information on the errors occured during the update processing is stored in the '.SUM' & '.LST' files and can be viewed by the Chart Manager
1. General information.
Producing agency code for update: 100 (same as producing agency code for base cell)
Edition number: 3
Update number: 0 for the source cell, changed to 1
Issue date: 20040312

- Archive log. An archive log of certain format charts is called by pressing Reports button on “Table”, “Ship Collection” or “Catalogue” panels of the CA. This log contains information on the completed operations similar to the information in general log generated for the given format but recorded onto the computer hard disk.

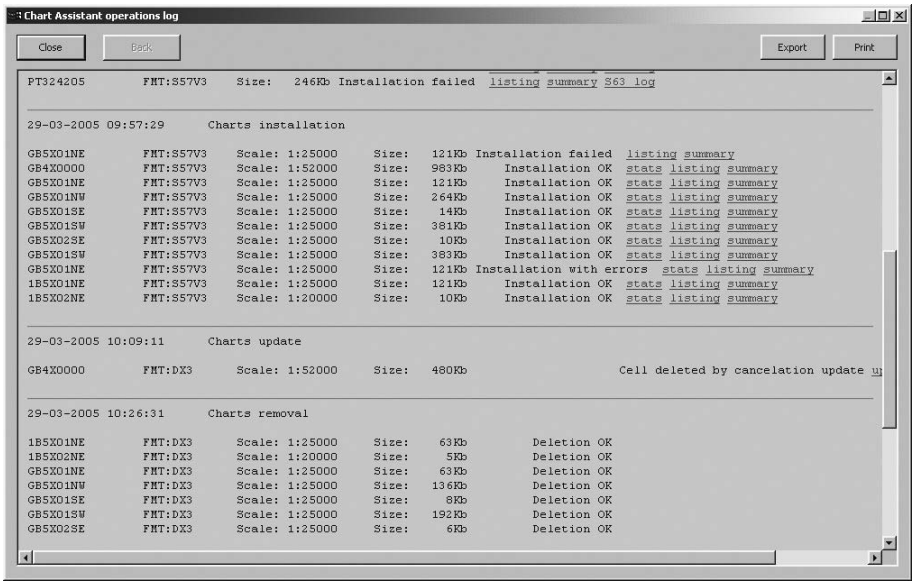


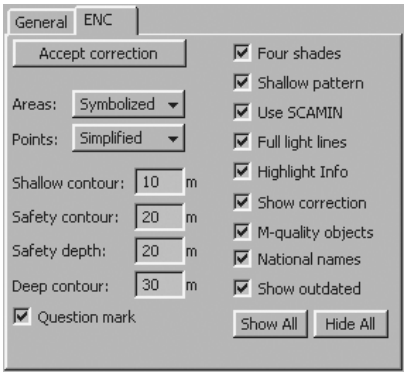
Chart Assistant operations log
Close
Back
Export
Print
PT324205 FMT:S57V3 Size: 246Kb Installation failed listing summary S63 log
29-03-2005 09:57:29 Charts installation
GB5X01NE FMT:S57V3 Scale: 1:25000 Size: 121Kb Installation failed listing summary
GB4X0000 FMT:S57V3 Scale: 1:52000 Size: 983Kb Installation OK stats listing summary
GB5X01NE FMT:S57V3 Scale: 1:25000 Size: 121Kb Installation OK stats listing summary
GB5X01NW FMT:S57V3 Scale: 1:25000 Size: 264Kb Installation OK stats listing summary
GB5X01SE FMT:S57V3 Scale: 1:25000 Size: 14Kb Installation OK stats listing summary
GB5X01SW FMT:S57V3 Scale: 1:25000 Size: 381Kb Installation OK stats listing summary
GB5X02SE FMT:S57V3 Scale: 1:25000 Size: 10Kb Installation OK stats listing summary
GB5X01SW FMT:S57V3 Scale: 1:25000 Size: 383Kb Installation OK stats listing summary
GB5X01NE FMT:S57V3 Scale: 1:25000 Size: 121Kb Installation with errors stats listing summary
1B5X01NE FMT:S57V3 Scale: 1:25000 Size: 121Kb Installation OK stats listing summary
1B5X02NE FMT:S57V3 Scale: 1:20000 Size: 10Kb Installation OK stats listing summary
29-03-2005 10:09:11 Charts update
GB4X0000 FMT:DX3 Scale: 1:52000 Size: 480Kb Cell deleted by cancelation update
29-03-2005 10:26:31 Charts removal
1B5X01NE FMT:DX3 Scale: 1:25000 Size: 63Kb Deletion OK
1B5X02NE FMT:DX3 Scale: 1:20000 Size: 5Kb Deletion OK
GB5X01NE FMT:DX3 Scale: 1:25000 Size: 63Kb Deletion OK
GB5X01NW FMT:DX3 Scale: 1:25000 Size: 136Kb Deletion OK
GB5X01SE FMT:DX3 Scale: 1:25000 Size: 8Kb Deletion OK
GB5X01SW FMT:DX3 Scale: 1:25000 Size: 192Kb Deletion OK
GB5X02SE FMT:DX3 Scale: 1:25000 Size: 6Kb Deletion OK

The Export button in each log file serves for saving it on an external carrier (see section User Manual, paragraph Saving and Printing Out Information Files).

ENC Chart Display (S-52 Presentation)

For each point type object, a certain symbol of the required size and colour is selected from the symbol library by its code and attribute values, and is displayed in the point with the specified coordinates. For each line type object, a line of the certain style and colour is selected by its code and attribute values. The line’s position is determined by its coordinates. And finally, for each area type object, colour and style of the area infill is selected by its code and attribute values. The area’s position is determined by its coordinates. It is the set of point, line and area type objects, which generates the chart image, which the navigator sees on the screen. The set of symbols, colours, line styles, infill templates, are specified in the Presentation Library attached to the IHO Specifications for Chart Content and Display Aspects of ECDIS (S52). Therefore, in the system by any manufacturer, the same vector data should generate one and the same chart image.

To facilitate the handling of ENC charts, some additional object display and presentation style settings have been introduced, which can be made on ENC options page of “Ships Collection” panel:



- Accept correction – to activate the updating acceptance procedure on ENC format charts (before the acceptance correction highlighting symbols are displayed);
- To change the style of displaying boundaries of area type objects (Areas combo box):
  - Plain – to display the boundaries of area type objects as lines only;
  - Symbolized – to display the boundaries of area type objects with lines and conventional signs.
- To change the style of the point type object display (Points combo box):
  - Paper chart – to display the point type objects as symbols used for the paper charts;
  - Simplified – to display objects as simplified symbols.
- To turn on/off the display of objects which are not specified in S-52 standard (Question mark checkbox);
- To turn on/off the colour highlighting of set depth areas (Four shades checkbox);
- To display areas with depths smaller than the safety contour (Shallow pattern checkbox);
- To select the generalising method – to take into account or ignore the attribute value prohibiting its display on scales smaller than the specified scale (use SCAMIN checkbox):
  - ON – the attribute is taken into account (standard S-57 format generalisation);
  - OFF – SCAMIN attribute is not taken into account (objects will be displayed on any scales).
- To change the style of displaying lines limiting visibility sectors of aids to navigation (Full Light Lines checkbox):
  - ON – lines are displayed with regard to the visibility range of the light;
  - OFF – standard line display length.
- To turn on/off special highlighting of objects with “Info” attribute (Highlight Info checkbox);
- To highlight objects which were subjected to some changes in the process of updating (Show correction checkbox):
  - ON – objects which underwent some changes after the last received updating are highlighted in orange colour (update highlighting symbols);
  - OFF – highlighting of the updated objects is removed.

ATTENTION!

Before the accepting of the last updating, the objects, which were subjected to some changes in the process, are permanently highlighted with the orange colour. After the accepting of the last updating (Accept correction button), such object highlighting is removed. By default, the updating is accepted automatically, so the Accept correction button is not used (see document TRANSAS INS (V. 1.11.002). INSTALLATION GUIDE, chapter System Settings, section Chart Assistant Adjustment).

- To turn on/off the display of ground survey positioning and sounding accuracy symbols specified on the chart (M_quality objects checkbox);
- To turn on the display of national names (National names checkbox);
- To turn on the display of temporary objects regardless of their effective time (Show outdated checkbox).

ENC Format Chart Updating

SENC data correction is carried out when the updating file is loaded in Chart Assistant utility. Updating materials are stored on a CD in separate files: `*.001`, `*.002`, etc. and do not affect SENC data. All the changes made in the chart are highlighted when it is displayed on the ECDIS/RADAR task screen.

Table of correction highlighting symbols:

Correction	Correction highlighting symbol
Plotted point type object	
Deleted point type object (information on the object is displayed in orange colour)	
Modified point type object (information on the modified parameter is displayed in orange colour)	
Shifted point type object: • old position; • new position	
Plotted sounding	
Deleted sounding	
Modified sounding	
Plotted line/area type object	
Deleted line/area type object (information on the object is displayed in orange colour)	
Modified line/area type object (information on the modified parameter is displayed in orange colour)	
Shifted line/area type object: • old position; • new position	

Updating materials for a chart under a certain number are issued until there is a new edition of the same chart, which will include all the previously made corrections. It should also be taken into account that information is not accumulated in the production of updating materials for ENC format charts, as for the updating of chart of a single edition, all the available updating issues should be successively installed.

Chart Assistant utility facilities allow monitoring correctness of ENC format chart updating installation.

If the rules for the installation of updating materials are not observed, updating is not made and the following entries are made in the general log:

- if an attempt is made to install an earlier chart updating issue for a later chart edition;

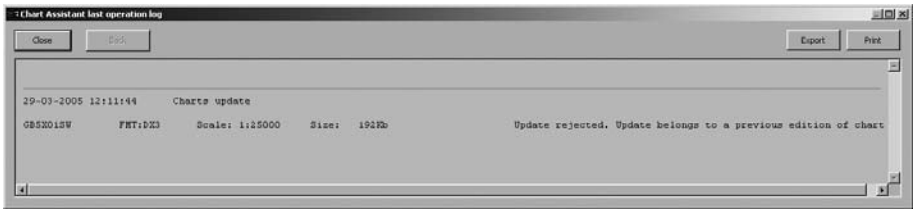


Chart Assistant last operation log
Close
Back
Export
Print
29-03-2005 12:11:44 Charts update
GB5X01SW ENT:DX3 Scale: 1:25000 Size: 192Kb Update rejected. Update belongs to a previous edition of chart

- if an attempt is made to install a later chart updating issue for an earlier chart edition;

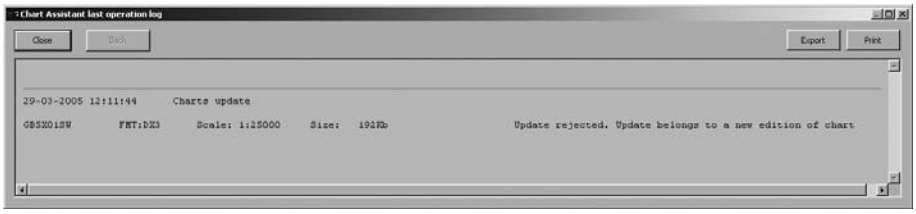


Chart Assistant last operation log
Close
Back
Export
Print
29-03-2005 12:11:44 Charts update
GB5X01SW FMT:DX3 Scale: 1:25000 Size: 192Kb Update rejected. Update belongs to a new edition of chart

- in case of incorrect sequence of installation or omission of updating issues for a single edition.

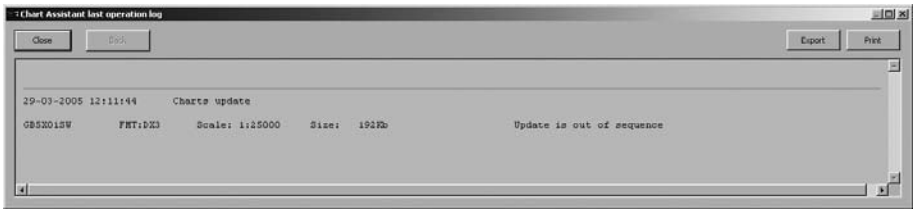


Chart Assistant utility also allows the check of issues containing updating materials. If these have some distortions, the following entries are made in the general log:

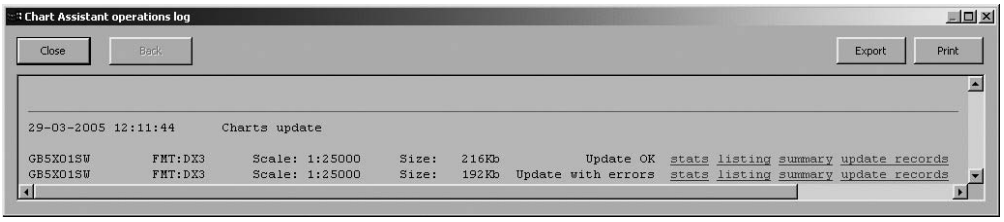


Chart Assistant operations log
Close
Back
Export
Print
29-03-2005 12:11:44 Charts update
GB5X01SW FMT:DX3 Scale: 1:25000 Size: 216Kb Update OK stats listing summary update records
GB5X01SW FMT:DX3 Scale: 1:25000 Size: 192Kb Update with errors stats listing summary update records

More detailed information can be looked up in the completed updating text file `*.html` (called by pressing “update records” link).

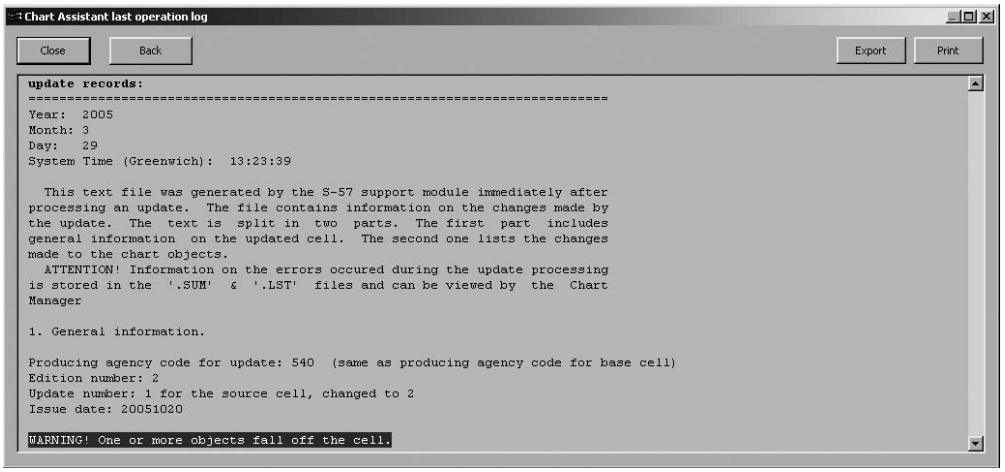


Chart Assistant last operation log
Close
Back
Export
Print
update records:
Year: 2005
Month: 3
Day: 29
System Time (Greenwich): 13:23:39
This text file was generated by the S-57 support module immediately after processing an update. The file contains information on the changes made by the update. The text is split in two parts. The first part includes general information on the updated cell. The second one lists the changes made to the chart objects.
ATTENTION! Information on the errors occured during the update processing is stored in the '.SUM' & '.LST' files and can be viewed by the Chart Manager
1. General information.
Producing agency code for update: 540 (same as producing agency code for base cell)
Edition number: 2
Update number: 1 for the source cell, changed to 2
Issue date: 20051020
WARNING! One or more objects fall off the cell.

With all the necessary conditions observed, the CA performs chart updating. The general log in the case will look as follows:

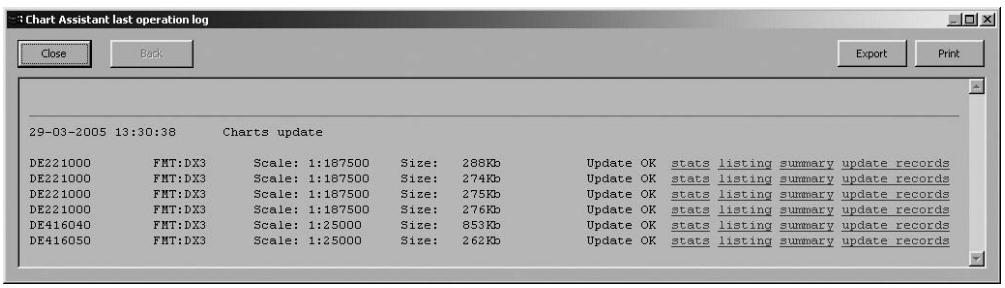
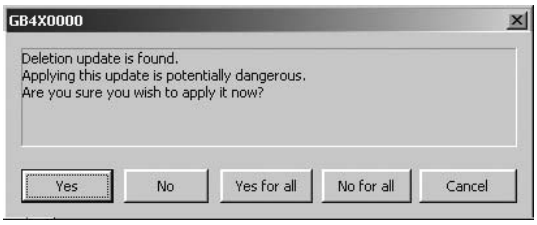
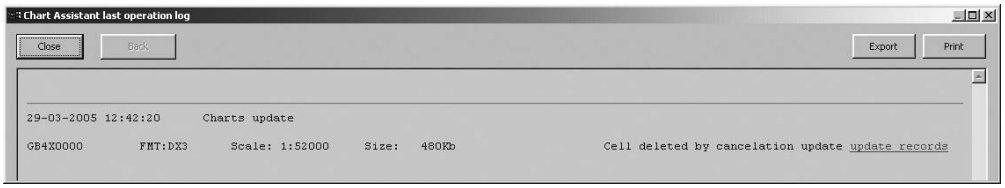


Chart Assistant last operation log
Close
Back
Export
Print
29-03-2005 13:30:38 Charts update
DE221000 FMT:DX3 Scale: 1:187500 Size: 288Kb Update OK stats listing summary update records
DE221000 FMT:DX3 Scale: 1:187500 Size: 274Kb Update OK stats listing summary update records
DE221000 FMT:DX3 Scale: 1:187500 Size: 275Kb Update OK stats listing summary update records
DE221000 FMT:DX3 Scale: 1:187500 Size: 276Kb Update OK stats listing summary update records
DE416040 FMT:DX3 Scale: 1:25000 Size: 853Kb Update OK stats listing summary update records
DE416050 FMT:DX3 Scale: 1:25000 Size: 262Kb Update OK stats listing summary update records

For some charts, “deleting updating” (“zero” chart edition) may be available on the updating disk. The deleting updating means that the chart is outdated and is required to be removed from the ship folio. When such updating is identified, the following warning is displayed:



If you confirm the deleting (“Yes” button) the chart in question is deleted from the ship folio. An appropriate entry is made in the general log.



The chart deleting may be cancelled at the user’s wish (“No” button), but in this case the chart is considered not updated.

ENC Chart Licensing

Transas Ltd. holds IHO S-63 security scheme for the use of their technologies in its electronic chart system. Piracy protection and selective access are achieved by encrypting the ENC information. This scheme envisages the data server encrypting its own data before supplying it to the data client. The encrypted ENC is then decrypted by the ECDIS prior to forming the SENC.

To be able to use the IHO S-63 ENC security scheme, the option “Vector ENC (S-52 Standard Presentation)” should be enabled in the users license. If this option has been enabled, the user is assigned with USER PERMIT identifier required for the chart decoding. The USER PERMIT can be found in `setup.id` file of the users license delivery set. To obtain CELL PERMITS and decrypt S-63 ENC data, a chart order should be sent to DATA SERVER. The order should include:

- user address data (country, town or port of registry, company or ship owner, ship name);
- name of hardware/software used for the chart display (e.g. Navi-Sailor, Navi-Radar, Transas INS);
- name of the software product manufacturer (Transas);
- USER PERMIT code supplied to the user by Transas;
- list of ordered charts.

In this case, the following will be delivered to the user:

- CD(s) with charts (CHART CD);
- diskette (or another computer information carrier) with CHART PERMIT files which constitute a special code used by the hardware for checking the user’s right to decode a particular chart for the use.

The term of the user’s right for IHO S-63 ENC charts is determined by the license whose expiry date is specified for each chart in the CHART PERMIT.

The S-63 “IHO DATA PROTECTION SCHEME” Standard contains a complete list of all terms used within this section and should be referred to in the event of any confusion.

SA Certificates are digital files issued by the Certification Authority. They bind a specific public key as well as other information. SA Certificates are intended for preventing unauthorized persons from using a phone public key to impersonate someone else. The protection scheme uses a chain of Certificates, each one certifying the previous one until all parties are confident in the identity in question. Data Servers (e.g. UKHO or Primar) create their own SA Certificates.

ENC data authentication is achieved by the Chart Assistant utility verifying of the dataset provided by the Data Server. The check of the validity of each ENC digital signature is performed from the pre-installed version of SA Certificate.

In case if Data Servers are using other SA Certificates for ENC digital signature, it must be installed by means of CA to allow use of the respective charts (see section User Manual, paragraph Installing Licenses).

Transas SENC Charts

SENC Data

SENC Service has started as per the 1st of February 2005. Transas is able to deliver official ENC data in SENC format as per the IHO amendment to paragraph 3.3 of S-52 and a new Technical Resolution A3.11 adopted at IHO's 16th International Hydrographic Conference. The Transas SENC Service has also been approved by Det Norske Veritas (DNV).

Two RENCs are the source of ENC data:

- Primar-Stavanger. It combines data of national HO's from 11 countries (Denmark, Estonia, Finland, France, Greece, Latvia, Norway, Poland, Russia, Singapore, and Sweden);
- IC-ENC. It combines data of national HO's from Belgium, Cyprus, Germany, Egypt, India, the Netherlands, Portugal, South Africa, Spain, Sri Lanka, and the United Kingdom;
- NOAA ENC (USA). The NOAA ENC supports all types of marine navigation by providing the official database for electronic charting systems, including the Electronic Chart Display and Information System (ECDIS).

As it is technically impracticable to use official ENC chart data in ECDIS navigational systems direct in S-57 format, ENCs are converted into the SENC (System Electronic Navigational Chart) data with similar contents. This conversion can be made either directly on board by the ECDIS system or ashore by the SENC Service Company. It should be noted that the SENC service provided by the company features a number of advantages over the conversions made on board.

The main advantage of SENC Distribution is that the on-board customer does not have to spend considerable time and patience required to convert the ENCs to the SENC. There are other advantages, such as simplified ordering procedures and SENC data quality control by Transas experts. Due to the physical storage limitations of CDs (700 MB), we are forced to split SENC collection and issue a number of SENC CDs.

The ENC data from countries, which have not yet approved SENC distribution, are distributed on Primar CDs in S-57 format. The principles of ordering and receiving SENC data are different to that for TX-97 distribution. The main differences are:

- the SENC Service is available only for users of Transas navigational systems who have enabled the option "ENC-S52 Presentation";
- the SENC Data can be loaded only into a system installed from CD MNS18 or later;

- the Transas-Primar distribution contract does not provide for chart quantity discounts, therefore all SENC data sets can only be sold as “a chart by chart” order;
- the price of an ENC chart depends on the country of origin – the chart producer; this price always includes ability for user to load updates during the period of the ENC Service (normally 6–12 months).

The list of national HO’s cooperating with Transas is permanently expanded.

Data in Raster Form

The data in the raster form is obtained in the process of a paper chart scanning. In the machine-readable form, such data constitutes a bit image (bitmap), which is formed as an array of pixels (graphic elements) originated in the intersection of rows and columns. The chart that is displayed on the computer monitor screen is, in fact, a facsimile copy of the source paper chart. It is formed by a set of pixels, each of them having certain rectangular coordinates (x, y) and colour. The number of pixels is determined by the scanner resolution. The larger resolution determined by the number of lines per on millimetre, the larger is the number of pixels formed in the process of scanning.

ARCS and Seafarer Format Charts

HCRF Standard

The raster chart (RNC) production specification is determined in the IHO S-61 Special Publication (edition 1, January 1999). Any RNC is required to contain an image file, which is a digital facsimile of an existing paper chart, as well as meta data describing RNC.

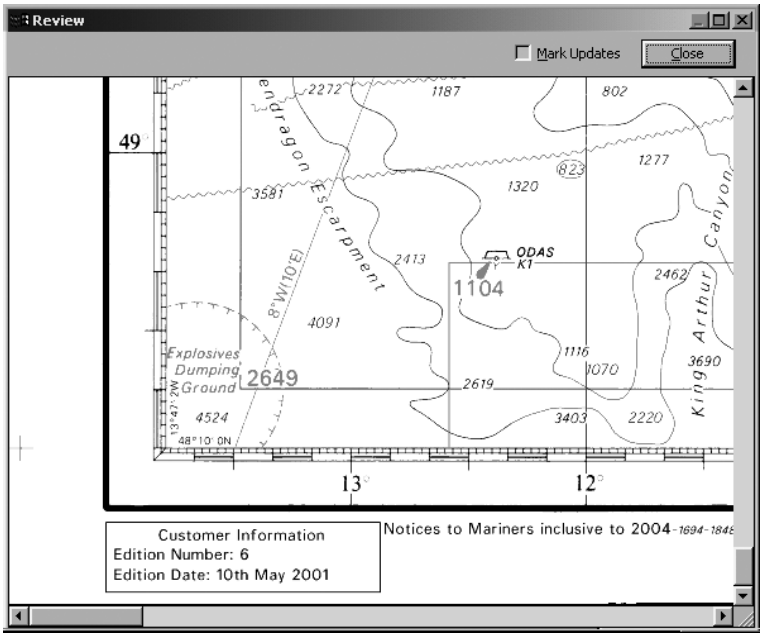
The RNC production is run in the UK (ARCS), Australia (Seafarer), USA and Canada (BSB/NDI).

The digital format of the presentation file is determined by the national hydrographic office, which produces the RNC. The meta data, along with such information as the RNC number, producing agency, edition date, etc. is required to contain parameters and algorithm for the conversion of pixels rectangular coordinates (x, y) to the geographic coordinates (φ, λ), and the other way round.

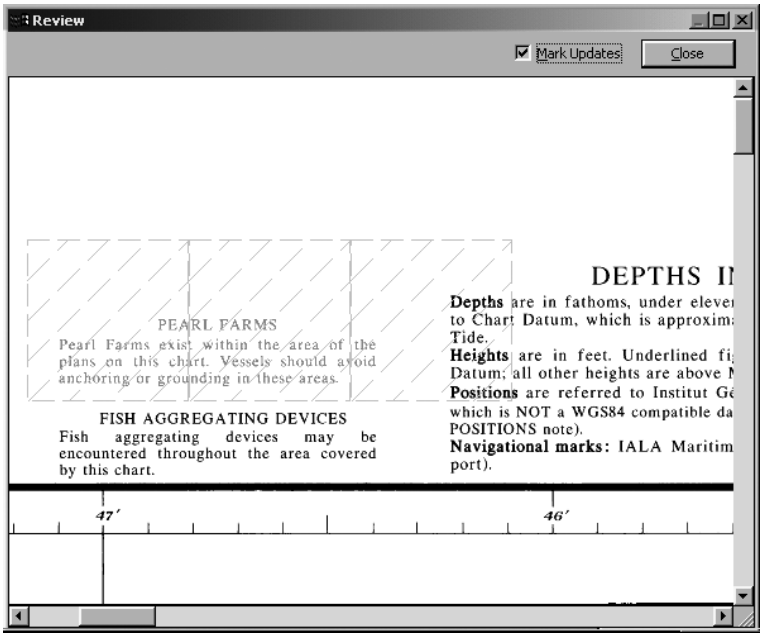
The transfer of updating information in the raster form is performed by producing raster data of the fragment of the source paper chart where some changes of navigational situation have been reflected. Therefore, “patch” is put on the RNC, and it becomes updated.

Specific Features of ARCS Format Chart Display

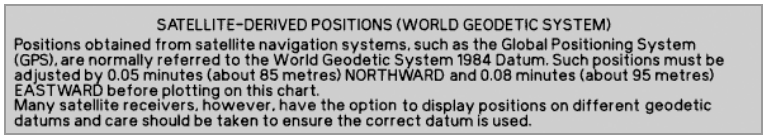
As required by the UKHO, the CA features a capability to fully display ARCS format charts. Additional information arranged in the title part, margins and on the free spaces of ARCS raster charts within the chart boundaries, can be viewed by using Review function, which is called by pressing button in Charts Display Area of “Ship Collection” panel.



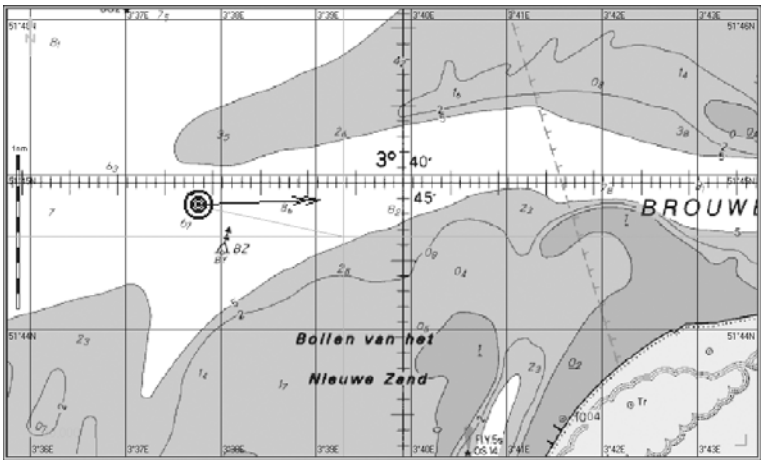
As this function is turned on, an ARCS chart is displayed on the original scale only without any additional information in a special window. The checked Mark Updates checkbox allows the display of corrected chart fragments. Such fragments are delineated with a red frame with slanting hatching.


Review
Mark Updates
Close
PEARL FARMS
Pearl Farms exist within the area of the plans on this chart. Vessels should avoid anchoring or grounding in these areas.
FISH AGGREGATING DEVICES
Fish aggregating devices may be encountered throughout the area covered by this chart.
DEPTHS
47′
46′

Some ARCS format charts use the system of coordinates different from WGS-84. The ECDIS task shifts such charts automatically to an offset specified on them, i.e. the chart is thus referenced to WGS-84 datum. This is why when coordinates are received from the GPS system based on WGS-84 datum, the ship position is plotted on the chart without an offset.


SATELLITE-DERIVED POSITIONS (WORLD GEODETIC SYSTEM)
Positions obtained from satellite navigation systems, such as the Global Positioning System (GPS), are normally referred to the World Geodetic System 1984 Datum. Such positions must be adjusted by 0.05 minutes (about 85 metres) NORTHWARD and 0.08 minutes (about 95 metres) EASTWARD before plotting on this chart.
Many satellite receivers, however, have the option to display positions on different geodetic datums and care should be taken to ensure the correct datum is used.

An offset for ARCS format electronic chart is specified in the heading of the file containing this chart. The original coordinate grid of ARCS format chart is shown on the ECDIS task screen as lines with perpendicular strokes.



Log of Operations on Raster Chart Collection

Information on the handling of the chart folio is essential; therefore, Chart Assistant utility provides a capability to create a number of logs after the operations on charts. There are the following log types:

- Special log for charts in ARCS and Seafarer formats is generated automatically after the installation and updating operations on these chart formats. The log includes information on the completed work and the warnings listed below in case of errors:
  - during the installation:

    FATAL ERROR: INCORRECT CHART PERMIT;
    FATAL ERROR: NO PERMITS FOUND;
    PERMIT NOT UPDATED.

  - during the updating:

    Chart ____ (Chart number). Update information relates to a newer version of the chart. Please load the UPDATE CD that contains ____ (Chart number) with an issue date of RCID (RCID – Issue date of the chart which is being updated);
    Chart ____ (Chart number). The chart data already incorporates this update information. Please load the latest UPDATE CD.

  - when the license term expires:

    Chart ____ (Chart number). Licence expired – updating is not permitted. Please contact your agent to re-new licence;
    Chart ____ (Chart number). Warning: License expires in less than one month. Please contact your ARCS agent for a licence renewal;
    Chart ____ (Chart number). Warning: License expired. The displayed chart may not be up. Contact to your agent to arrange for a license renewal[1];
    or

[1] – warnings of this kind are displayed both, in the Chart Assistant and in the ECDIS task.

Chart ____ (Chart number). Warning: License expired. Chart can not be displayed. Contact to your agent for a license renewal;
Chart ____ (Chart number). The loaded version of this chart is too old;
To be used with this license. Please load a more recent version of the chart. Chart version is ___.
Permit version is ___(1).

- General log for the charts of all the formats is generated by the CA after any operation on the chart folio:
  - installation;

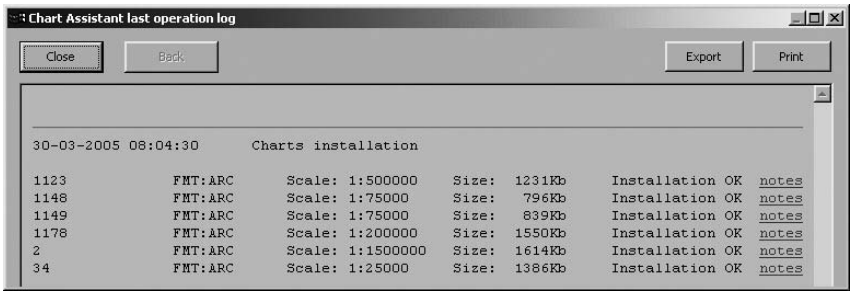


Chart Assistant last operation log
Close
Back
Export
Print
30-03-2005 08:04:30 Charts installation
1123 FMT:ARC Scale: 1:500000 Size: 1231Kb Installation OK notes
1148 FMT:ARC Scale: 1:75000 Size: 796Kb Installation OK notes
1149 FMT:ARC Scale: 1:75000 Size: 839Kb Installation OK notes
1178 FMT:ARC Scale: 1:200000 Size: 1550Kb Installation OK notes
2 FMT:ARC Scale: 1:1500000 Size: 1614Kb Installation OK notes
34 FMT:ARC Scale: 1:25000 Size: 1386Kb Installation OK notes

  - deleting;

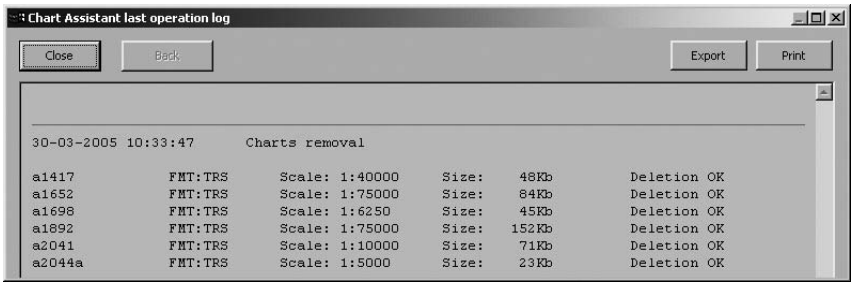
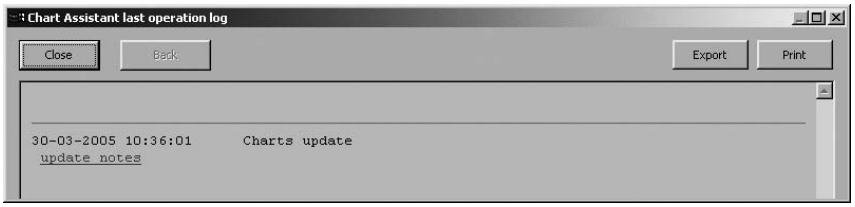


Chart Assistant last operation log
Close
Back
Export
Print
30-03-2005 10:33:47 Charts removal
a1417 FMT:TRS Scale: 1:40000 Size: 48Kb Deletion OK
a1652 FMT:TRS Scale: 1:75000 Size: 84Kb Deletion OK
a1698 FMT:TRS Scale: 1:6250 Size: 45Kb Deletion OK
a1892 FMT:TRS Scale: 1:75000 Size: 152Kb Deletion OK
a2041 FMT:TRS Scale: 1:10000 Size: 71Kb Deletion OK
a2044a FMT:TRS Scale: 1:5000 Size: 23Kb Deletion OK

  - updating.



- Archive log of the RNC format charts is called by Reports button. This log contains information on the completed operations similar to the information in general log generated for the given format but recorded onto the computer hard disk.

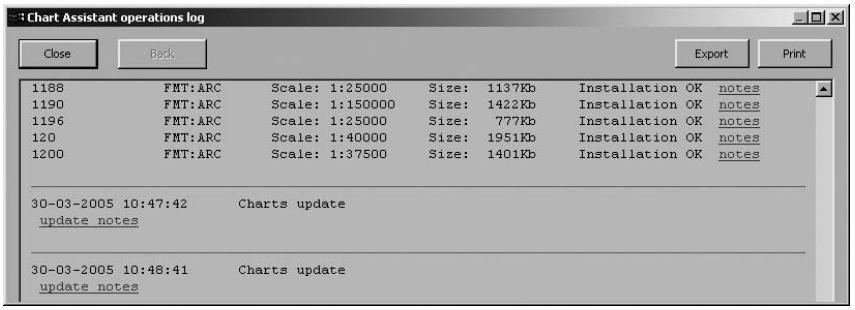


Chart Assistant operations log
Close
Back
Export
Print
1188 FMT:ARC Scale: 1:25000 Size: 1137Kb Installation OK notes
1190 FMT:ARC Scale: 1:150000 Size: 1422Kb Installation OK notes
1196 FMT:ARC Scale: 1:25000 Size: 777Kb Installation OK notes
120 FMT:ARC Scale: 1:40000 Size: 1951Kb Installation OK notes
1200 FMT:ARC Scale: 1:37500 Size: 1401Kb Installation OK notes
30-03-2005 10:47:42 Charts update
update notes
30-03-2005 10:48:41 Charts update
update notes

You can obtain information on the chart in Chart Assistant utility by using Info button.

Chart Licensing

Transas Ltd. holds UK HO and Royal Australian Navy Hydrographic Office licenses for the use of ARCS technology in its ECDIS electronic chart system. To ensure protection from the unauthorised copying, the coding of the chart data and necessary additional information is used in the ARCS and Seafarer. As the ARCS and Seafarer charts are displayed, this data is decoded.

Each INS owner is assigned USER PERMIT identifier required for the chart decoding. This code is supplied together with the product.

For the use of ARCS and Seafarer format charts, the user is also assigned a personal identification number (PIN), which should be entered on request at the time of the ECDIS task start.

To be able to use ARCS and Seafarer format charts in the ECDIS task, it is necessary to order this option at the time when the software is bought, and also to send a chart order to UK HO or RAN HO respectively. The order should include:

- user address data (country, town or port of registry, company or ship owner, ship name);
- name of hardware/software used for the chart display (e.g. Transas INS);
- name of the software product manufacturer (Transas Ltd);
- user permit code supplied to the user by Transas Ltd;
- PIN code supplied to the user by Transas Ltd;
- list of ordered charts.

In this case, the following will be delivered to the user:

- CD(s) with charts (CHART CD);
- diskette (or another computer information carrier) with `CHART PERMIT` files which constitute a special code used by the hardware for checking the user's right to decode a particular chart for the use.

The term of the user's right for ARCS and Seafarer charts is determined by the license whose expiry date is specified for each chart in the `CHART PERMIT`.

Updating of RNC Format Charts

Once a week, UKHO/RAN HO issues a carrier with correction data. This data like the charts themselves, are distributed via the manufacturer's distributor network.

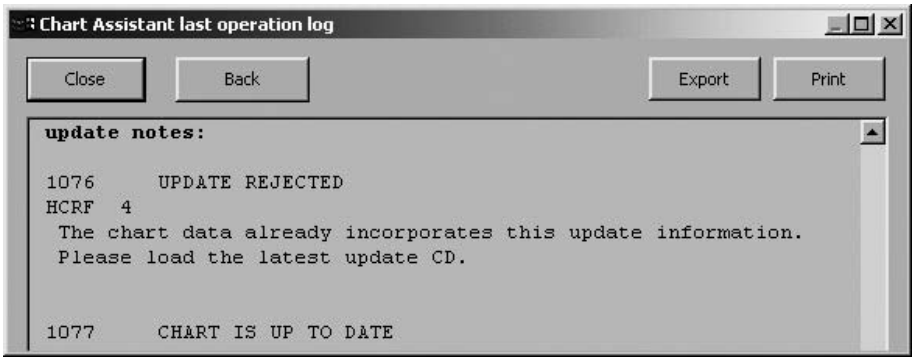
Correction of ARCS and Seafarer format data is performed when the updating file is loaded via Chart Assistant utility.

It should be noted that updating materials for a chart under a certain number are issued until there is a new edition of the same chart which will include all the previously made updates. Unlike in the case of ENC format charts, as updating materials are issued for RNC format charts, information is accumulated, because each subsequent issue of updating for a chart of a single edition includes all the previous update issues.

Facilities of Chart Assistant utility allow monitoring correctness of RNC format chart updating installation.

If the rules for the installation of updating materials are not observed, updating is not made and the following entries are made in the general log (called by pressing “update records” link):

- if an attempt is made to install an earlier chart updating issue for a later chart edition;



- if an attempt is made to install a later chart updating issue for an earlier chart edition.

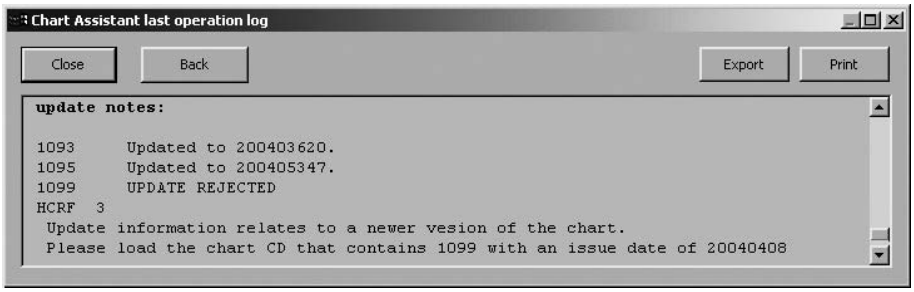
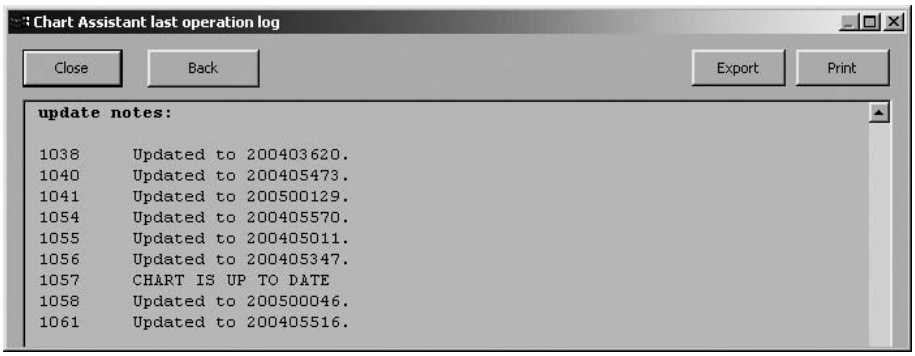


Chart Assistant last operation log
Close
Back
Export
Print
update notes:
1093 Updated to 200403620.
1095 Updated to 200405347.
1099 UPDATE REJECTED
HCRF 3
Update information relates to a newer vesion of the chart.
Please load the chart CD that contains 1099 with an issue date of 20040408

The chart fragment, which is in fact an updating change, is overlaid on the main chart image in accordance with coordinates specified in the updating file. This chart fragment can be highlighted on the chart during the display on the CA screen by means Review function, which is called by pressing button. After the updating has been performed, the following entries are made in the general log:



NOS/GEO Format Charts

These are charts produced by SoftChart International.

BSB/NDI Format Charts

These are raster charts from the US and Canadian HOs.

The Transas INS supports operation with BSB/NDI charts of the following versions:

- version 3.0, revision 3.07;
- version 2.0.

When operating with these versions, the ECDIS task only displays the charts of this format.

Transas Chart Catalogues

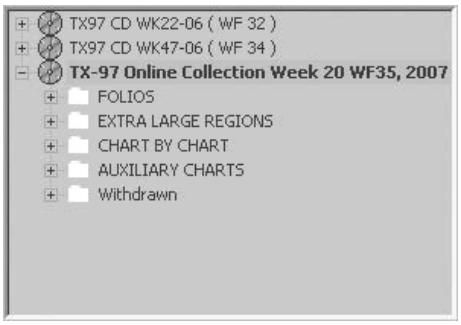
Issue of Catalogues

Every week, Transas issues catalogues of both TX-97 charts and Transas ENC/SENC. If the age of the Chart Assistant utility catalogue in use is less than a week, it is considered to be up-to-date. The rest of catalogues are OUTDATED. Each issue of a WF CD with the world chart collection supplies a catalogue up-to-date as of the CD issue time. The rest of up-to-date catalogues are supplied via Internet.

There is a capability to load several catalogues with the same format charts identified by name. Selection of the work directory is made in the Chart Catalogues Area.

TX-97 Chart Catalogue Structure

World Folio (WF) TX-97 chart catalogue consists of four folders:



- Folios – a folder consisting of two collections where the chart catalogues are sorted in the following order:
  - All Folios – chart folios are arranges in the alphabetical order;
  - Folios by Country – chart folios are grouped by countries arranged in the alphabetical order.
- Extra Large regions – a folder where the entire chart catalogue collection is split into several geographic regions;
- Chart by Chart – a folder where the world collection is grouped by the chart numbers in the ascending order;
- Auxiliary Charts – a folder in which there are maps included in an additional collection;
- Withdrawn – a folder containing maps excluded from the catalogue.

“All folios”, “Folios by country” and “Auxiliary charts” folios contain chart folios consisting of charts. “Extra Large Regions” folio contains large areas. Chart folios and areas are marked with icon:

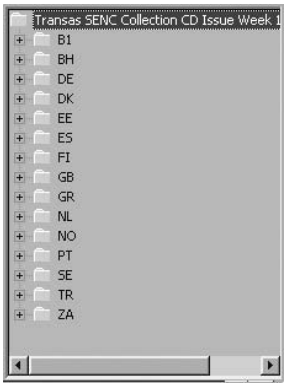
Before the chart name in the catalogue, there is a special mark indicating its status:

- there is no license for the chart;
- installed in the ship collection a chart newer than that listed in the catalogue, and a new catalogue is required to be loaded;
- the chart is updated in accordance with the latest catalogue version (up-to-date);

- according to the catalogue installed, there is updating for the chart in question (to be corrected).

Transas ENC/SENC Chart Catalogue Structure

Transas ENC/SENC catalogue consists of chart catalogues grouped by countries arranged in the alphabetic order. This catalogue is identical for the ENC format charts and SENC format converted charts.



Transas ENC/SENC catalogue folders contain charts whose status is shown by the same marks as the status of TX-97 charts (see the previous paragraph).

Charts Update Service

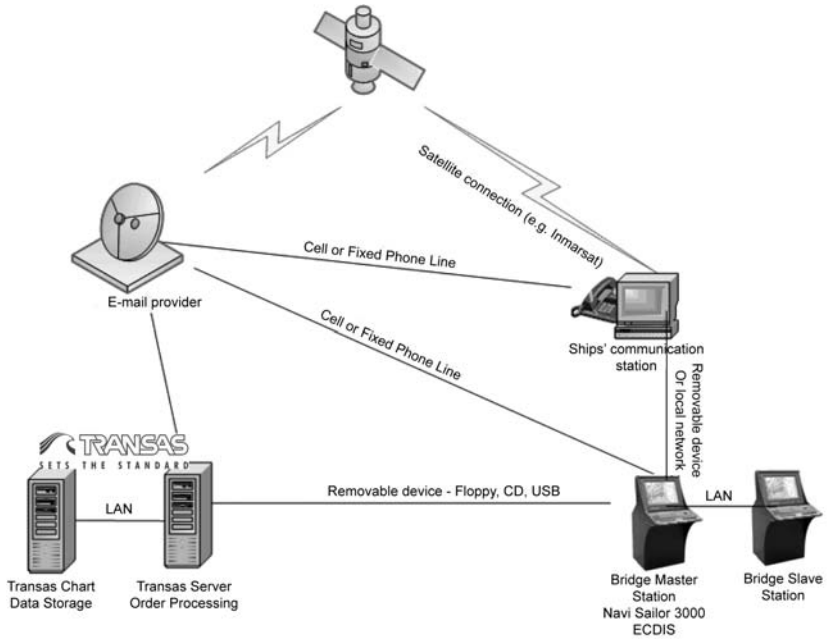
General

The main goal of using official electronic charts is to contribute to safety of navigation. According to SOLAS chart carriage requirements, all charts used by a mariner must always be up-to-date, so it can be said that chart updating is a key point of safety and consequently key point of the TX-97 and SENC delivery service. Transas updates its TX-97 and SENC collection once a week.

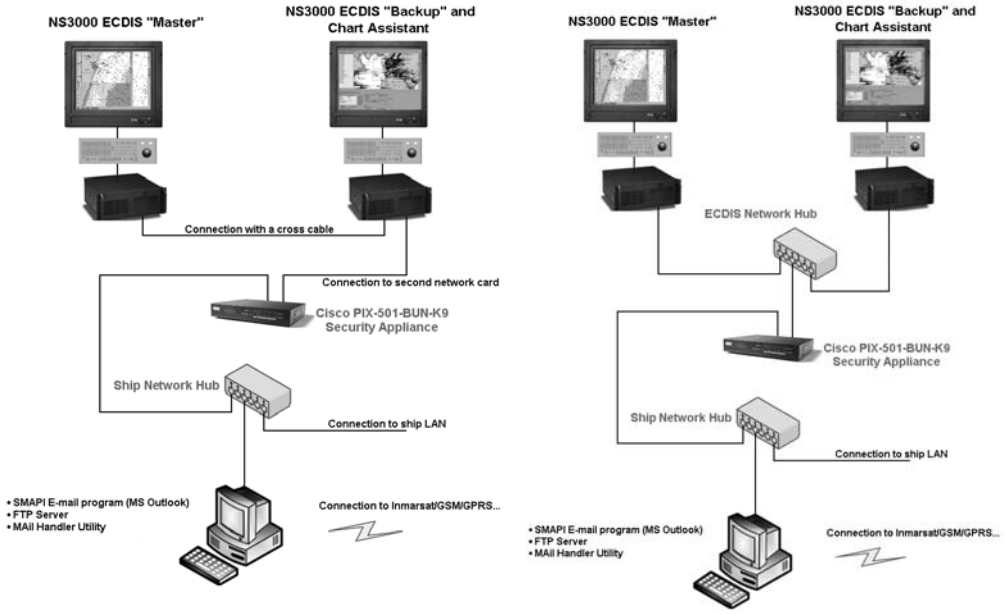
Every three months, for each chart format (TX-97 and SENC), Transas issues a World Chart Folio CD containing a chart collection up-to-date as of the issue time.

Ship chart collection support implies three types of servicing:

- On-Line Service;
- Base Maintenance Service;
- Professional Maintenance Service.



The shipboard INS and Chart Assistant system can be connected to the ship communication computer which is used for receiving and sending e-mail. In this case, the navigation system can be protected from penetration of undesirable data (e.g. viruses) with the aid of Cisco PIX-501-BUN-K9 Security Appliance. The general diagram of the shipboard system/communication computer interaction is shown in the drawings below.


NS3000 ECDIS "Master"
NS3000 ECDIS "Backup" and Chart Assistant
Connection with a cross cable
Connection to second network card
Cisco PIX-501-BUN-K9 Security Appliance
Ship Network Hub
Connection to ship LAN
• SMAPI E-mail program (MS Outlook)
• FTP Server
• MAil Handler Utility
Connection to Inmarsat/GSM/GPRS...
NS3000 ECDIS "Master"
NS3000 ECDIS "Backup" and Chart Assistant
ECDIS Network Hub
Cisco PIX-501-BUN-K9 Security Appliance
Ship Network Hub
Connection to ship LAN
• SMAPI E-mail program (MS Outlook)
• FTP Server
• MAil Handler Utility
Connection to Inmarsat/GSM/GPRS...

Data exchange between the shipboard system and communication computer is via the FTP protocol. For this kind of exchange, installed on the communication computer should be the FTP server and the Mail utility which takes data from the mail program and places it on the FTP server. The data is then passed via the Cisco PIX-501-BUN-K9 Security Appliance to the navigation system and is installed in the CA. For more details of the Cisco PIX-501-BUN-K9 Security Appliance installation and setup, see TRANSAS INS (V. 1.11.002). INSTALLATION GUIDE.

On-Line Service

General

Updates to TX-97 and SENC charts issued on CD can be downloaded from the Transas web site.

This update collection includes not only update files, but also new edition of charts and new charts, issued after release of WF CD. Since number of new editions and new charts is continuously grows, size of the update collection increases very rapidly. This situation causes difficulties for On-Line Service users in downloading update collections, especially when end user connected to Internet via satellite connections, such as Inmarsat, Iridium, etc.

Offering to mariner new comprehensive and user-friendly service, based on online delivery of chart data – both charts and updates, can solve the abovementioned problem.

The key features of the Transas online chart service are:

- improved chart catalogue that combines private charts in TX-97 format and official charts in ENC/SENC format;
- ordering and receiving by e-mail up-to-date electronic charts in TX-97 and ENC/SENC format;

- ordering and receiving updates (only for TX-97 and SENC formats) either once or weekly during predefined period of time (subscription service);
- ordering and receiving updates (only for TX-97 and SENC formats) either to selected charts or to all ships chart collection.

Chart Assistant utility allows forming, sending and receiving orders for catalogues, charts, licenses and updating in on-line mode via e-mail.

Order Formation

- Ordering Chart Catalogue.

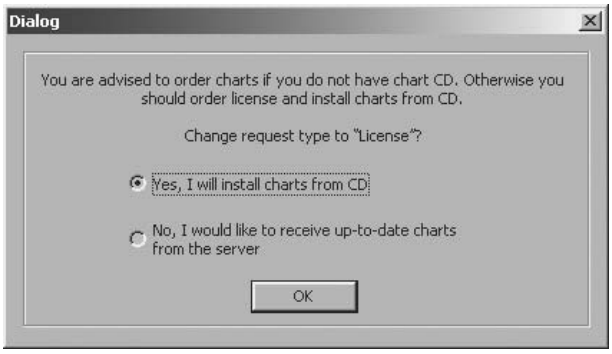
  An order for a catalogue of charts in any format can be placed if the age of the latest catalogue stored in the memory is more than 1 week, i.e. the loaded catalogue is not up-to-date.

  The CA provides a capability to order weekly sending of the catalogue. In this case, the catalogue will be sent to the user immediately after its creation. The user specifies the number of weeks during which the up-to-date catalogues will be delivered.

- Ordering New Charts.

  Order for charts is placed after they have been selected. Charts cannot be ordered unless there is a more recent catalogue than that which was contained on the CD used for the chart installation.

  In ordering charts you should remember that their delivery via the e-mail will larger expenses than the delivery of their permits. So if you have a WF CD, all you will have to do is order permits for the necessary charts. This is why, for the user convenience sake, the Chart Assistant utility provides the following warning when an attempt is made to order charts.


Dialog
You are advised to order charts if you do not have chart CD. Otherwise you should order license and install charts from CD.
Change request type to "License"?
Yes, I will install charts from CD
No, I would like to receive up-to-date charts from the server
OK

- Ordering New Licenses.

  Order for licenses is placed after the charts have been selected. The significance of the license order is the reduced traffic, as in this case it is assumed that charts will be installed from the CD, which is already available on board.

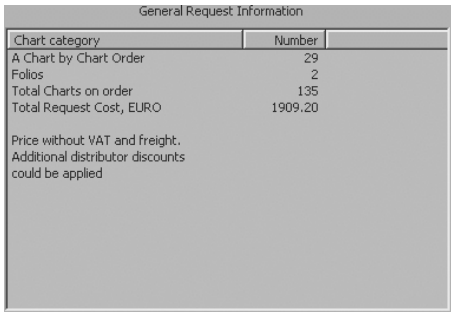
- Ordering Chart Updating.

  Updating order can be made for the installed charts only (ship collection charts), and is placed after the charts have been selected. Updating cannot be ordered unless PMS (Professional Maintenance Service) option is open for TX-97 and/or SENC_CORR – for the SENC.

  Subscription capability is provided for the updating order, i.e. sending of a request in reply to which updating will be sent to the user automatically every week. The number of weeks during which the updating can be delivered, can vary and is limited by the updating service time. For TX-97 charts, this is the number of weeks remaining before the end of the current year.

- Ordering Quotation.

  When charts and permits are ordered, the Chart Assistant utility specifies an approximate price of the order. The reminder about this is provided by the warning which appears in the General Request Information window on the current “Request” page of the “Catalogue” panel.



  To determine the final price for the prepared order, use the request which is sent by using the Quotation button. In this case, the server takes into account all the discounts and sends a relevant message.

- Ordering Reconstruction of Full License Version.

  Data on the bought user licenses is stored at Transas. As new chart licenses or software options are bought, a full license is supplemented. If for some reasons the bought licenses have not reached the user, it is possible to order a copy of the full license to restore the missing options. Using Full License button sends a request for a full license.

Optimising Order

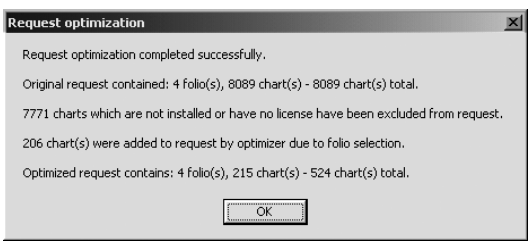
When sending a request for charts, licenses and updating, you should necessarily optimise the order. This allows the cost of the order and its delivery to be reduced.

In placing of a chart order, optimising is performed so that as few charts as possible would be selected on the chart-by-chart basis. Because the cost of individual charts is higher than when a folio which they belong to is ordered. The CA calculates the cost of ordering necessary charts within a chart folio (taking into account the unselected charts included in this folio), and separately, and chooses the minimum cost option. It also excludes the previously bought (licensed) charts from the order to avoid the second purchase.

Optimising in ordering chart updating consists in deleting charts which are not available in the ship collection and charts updated from the up-to-date catalogue data.

After the optimising, the screen displays “Request optimisation” window, which specifies:

- number of selected charts;
- number of charts already available and excluded from the order;
- number of added unselected charts to reduce the cost of the order;
- optimised order contents:
  - number of chart folios;
  - number of charts in the chart-by-chart order;
  - total number of charts.


Request optimization
Request optimization completed successfully.
Original request contained: 4 folio(s), 8089 chart(s) - 8089 chart(s) total.
7771 charts which are not installed or have no license have been excluded from request.
206 chart(s) were added to request by optimizer due to folio selection.
Optimized request contains: 4 folio(s), 215 chart(s) - 524 chart(s) total.
OK

Sending Order

After the order optimising, it can be sent or saved to an external storage.

The order is sent automatically by MS Outlook and MS Outlook Express mail programs. If other programs are used, the order is sent by the user in the form of a message with an attached request file. To enable this, it should first be saved to an external storage. Some of the mail programs have a function for the automatic sending of files stored in certain directories. For the automatic sending, it is necessary to adequately set up the CA (storing and receiving files with orders) and the mail program.

In case of the automatic sending, there are two options:

- the CA is installed on the same computer as the mail program. In this case, the message with an order arrived direct in the mail program Outbox. The message is then sent manually or automatically depending on the mail program settings;
- the CA and mail program are installed on different computers. If this is the case, installed on the computer with the mail program should be an additional Mail Utility supplied together with the CA. This utility takes a message with a request from the CA via the network and puts it into the mail program's Outbox. The mail program then sends the message.

Order Processing

Upon receipt of an order for new charts and licenses, the chart server sends a receipt acknowledgement to the user. The server then sends to the distributor a request to confirm payment under this order. Upon receipt of order payment confirmation from the distributor, the necessary data is sent to the user. This is why there is a certain interval between the sending of on order and reception of data.

No order of updating can be placed unless there is Professional Maintenance Service option in the license, and no payment confirmation from the distributor is required.

Catalogues are supplied free of charge.

Reception of Orders

Orders are received by e-mail program. If MS Outlook or MS Outlook Express program is used, there may be two options:

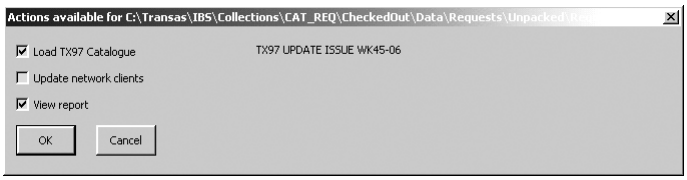
- the CA is installed on the same computer as the e-mail program. In this case, the CA regularly queries the mail program Inbox and takes a received message;
- the CA and e-mail program are installed on different computers, connected with the local network (LAN). In this case, on the computer where the e-mail program is installed, Mail Utility takes messages from the e-mail program Inbox and networks them to the CA.

If another mail program is used, the user receives a file with an order and saves it to a folder, which will be regularly queried by the CA. This folder is specified in the CA configuring.

Orders may arrive in the form of one or several files depending on their size. These files have the following format: `81ba9b79690e4833a5bab9d2f4c7473d_2_of_2.cdf`. Where the `_1_of_2` digits stand for the file number in the series and overall number of files in the order. In this way, should an error occur in the course of the order installation, the user can determine which part of information was lost during the data transfer from server to user and repeat the request.

After a message with an order has arrived in the CA, it is unpackaged, and the program identifies the received data type. A message on the reception of new data is then displayed. If any operation (chart installation, order optimising, etc) is underway at the time when the data is received, the message will appear after the operation is completed. The message contains the data type and a request to perform the following operations:

- If a chart catalogue is ordered:
  - to load a new catalogue;
  - to make an update of chart collection for network clients after the installation of charts and licenses;
  - to view a report.



- If charts are ordered:
  - to install licenses;
  - to install charts;
  - to make an update of chart collection for network clients after the installation of charts and licenses;
  - to view a report.

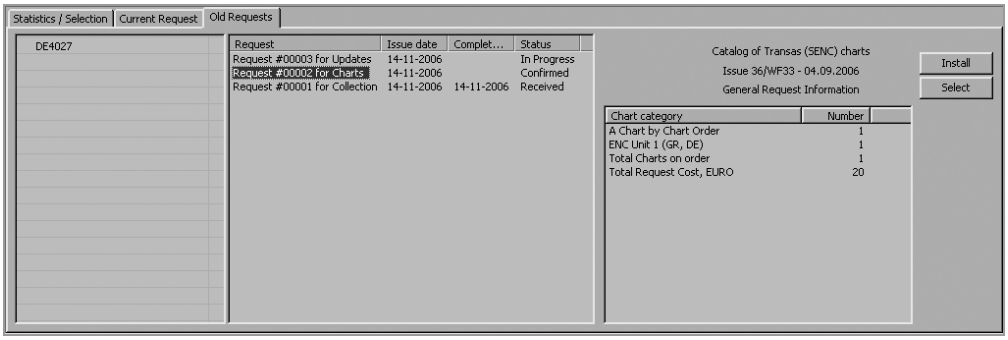
Actions available for C:\Transas\ChartAssistant\Requests\Unpacked\Request #00017 from 2005-03-28 for Chart...
Install TRANSAS license items
Request #00017 from 2005-03-28 for Charts
Show TX97 Disk Content
Request #00017 from 2005-03-28 for Charts
Install TX97 charts
Request #00017 from 2005-03-28 for Charts
Update network clients
View report
OK
Cancel

- If licenses are ordered:
  - to install licenses;
  - to make an update of chart collection for network clients after the installation of licenses;
  - to view a report.

- If updating is ordered:
  - to install updating installation licenses;
  - to install charts;
  - to make an update of chart collection for network clients after the updating installation;
  - to view a report.

Storing Orders

Formed orders are stored on “Old Requests” page of “Catalogue” panel.



Old requests may have the following status specified in the table column with the same name:

- Not sent – the order was formed but has not been sent, and has been stored in an external storage;
- In progress – the order has been sent;
- Confirmed – the order has been received by the chart server and is being processed;
- Refused – the order cannot be processed by the chart server and is, therefore, rejected;
- Received – an answer containing the requested data has been received.

There is a capability to view data contained in these orders. If an old request is selected with the cursor, the names of the chart folios and charts contained in it are displayed to the left of the table; a press on Select button selects them.

If data in the old request was not installed immediately after its receipt, it is possible to install them by using Install button.

Base Maintenance Service of TX-97 Format Charts

General

The base chart correction implies quarterly renewal of the ship chart folio taking into account changes in and additions to the WORLD CHART FOLIO CD. Supplied along with the collection is its license for one calendar year. The base updating procedure includes the replacement of license and installation of charts from a newly received WF CD.

Delivery Set

Item	Availability	Note
Dongle	No	
Current WF CD	Yes	Appropriate CD issue of the current year
License	Yes	
Documentation	No	

Professional Maintenance Service of TX-97 Format Charts

General

Professional updating includes the base updating (see above) and Notices to Mariners Correction Service, which provides a capability to “infuse” the correction information into the ship folio charts every two weeks. The updating information is accumulated during the calendar year. Therefore, charts installed from the last WF CD of the previous year and the latest updating file of the current year will correspond to the updating level of the last WF CD of the current year.

A license for the use of this option is provided for the term of one year.

The updating information is prepared once in two weeks and is placed on the company web site (http://www.transas.com/support). The user specifies the delivery at the time when the Agreement is signed: direct via Internet or on electronic carriers via shore agencies representing the user’s interests.

Delivery Set

Item	Availability	Note
	Every two weeks	
Dongle	No	
Current WF CD	No	Yes in case of new CD issue release
License	No	Yes in case of new CD issue release
Documentation	No	
1 – up to x floppy disks or CD containing Installation of Chart Correction	Yes	The carrier for the delivery of updating is determined by the agent responsible for the particular delivery

Transas SENC Format Charts Updating

The updating service implies weekly uploading of SENC data for the SENC Base CD (updating) on the company site (http://www.transas.com/support.asp).

SENC updating data consists of:

- Update – includes all the incremental updating files in S-57 received since the time of SENC CD issue (Issue<NN>_WF<NN>); it should be noted that available for installation is only the updating for charts purchased by the customer;
- New Charts – includes all the new charts in Transas SENC format received since the time of SENC CD issue;
- New Edition – includes all the new edition charts in Transas SENC format not included in SENC CD.

The updating information is stored in the form of self-unpacking archives (e.g. `Update47_WF21.exe`).

For Transas format SENC, the following updating can be used:

- Open S-57 updating;
- S-57 updating encoded in accordance with S-63 standard (if valid permits are available);
- Transas encoded S-57 updating;
- Binary updating (received with e-mail from the Transas chart server).

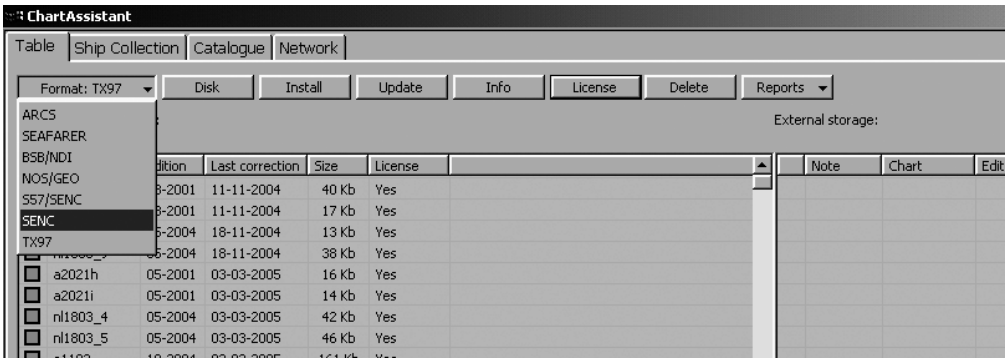
ENC Format Charts Updating

ENC format charts can only be updated via the company’s Internet site (http://www.transas.com/support). The collection on the site is updated every week.

Chart Assistant Tools

Active and Inactive Chart Formats

The currently set chart format is an active format, whereas the rest of the chart formats are inactive.



Display of Charts

Boundaries of the installed charts (ship collection charts) are shown in solid lines in the Charts Display Area on the Chart Panel, whereas boundaries of uninstalled charts are shown in dashed lines.

The colour of the chart boundary is determined by the following principles:

- Black – when the cursor is on a folder with the name of the active format catalogue, boundaries of all the charts included in this catalogues are displayed. When the cursor is positioned on “Folios”, “All Folios”, “Folios by country”, “Extra large regions”, “Chart by chart”, “Auxiliary charts”, boundaries of the charts only included in these folios are displayed;
- Grey – boundaries of non-active format charts (on “Ship Collection” panel, solid lines are used for displaying installed non-active format charts only);
- Green – when the cursor is positioned on particular chart folios, regions and folios with names of the countries (with the country codes in the case of Transas SENC catalogue), boundaries of the charts included in them are displayed. When the cursor is positioned on individual charts, their boundaries are shown in green. In this case, if “Auto adjust views” function is ON, the chart display area is focused on the charts included in this chart folio, or separate charts. If “Ships collection”, “To be corrected”, “On order” “Licensed (To be installed)” rows are selected in the table on “Statistics/Selection” page, boundaries of these charts are shown;
- Red – if chart folios or charts are selected for further operations, they are shown in red.

Catalogue panel has a filter which allows the necessary charts only to be shown. Besides, in the case of SENC collection, if Show Coverage Area is selected in the filter, the area covered with data is shaded. The colour of shading corresponds to the colour of the chart boundary it is put on.

With the change of an active format of loading of a new catalogue, all the settings are cancelled and Show all setting is activated automatically.

Selecting Charts

Charts are selected for further operations on them.

On “Table” panel, charts are selected by checking checkboxes next to the chart names.

On “Ships Collection” panel, charts are selected with cursor. To select one chart, position the cursor on its boundary and double click the left mouse/trackball button. To select several charts, use the graphic cursor (displayed by clicking the left mouse/trackball button) to select an area on the chart panel. It will select all the charts whose boundaries fall into the specified area. The selected charts are shown on the Chart Display Area in red.

To cancel the selection of one or several charts, use a similar procedure with cursor.

Chart selection/deselection on “Table” and “Ships Collection” panels is synchronised.

Charts in the Chart Display Area of Catalogue panel are selected/deselected in much the same way as in “Ships Collection” panel. If one chart is selected, with Auto adjust map and Tree views function ON, the catalogue tree opens on the selected chart.

To select folders, regions or chart folios in the catalogue tree, use the context menu which is displayed by clicking the right mouse/trackball button (“Select all” line). All the charts included in the selected folder, region or chart folio are selected. To select individual charts, chart folios or regions, check the checkboxes next to their names. If one chart is selected, with Auto adjust map and Tree views function ON, it is automatically displayed on the chart panel. In any case, to focus on the selected chart, double click the left mouse/trackball button.

The list of charts selected in “Catalogue” panel can be saved in an external storage for the further use. It is also possible to load chart lists from the external storage and make up lists of charts along the routes. To enable the chart selection, there is a capability to use both, route created and stored in the ECDIS task and the `*.rt3` format routes stored in the user specified folders. The chart list can also be loaded from the `*.xml` format files created by using the Primar Chart Catalogue and from the `items.lst` file included in the Transas INS license.

To cancel the selection for folders, regions and chart folios, use the context menu “Unselect all” line or uncheck checkboxes next to separate charts, chart folios or regions.

Information on Charts

The “Table”, “Chart Collection” and “Catalogue” panels provide information on the selected charts after a press on the Info button. The “Info” window displays the following information:

Chart	Chart name
Status	Chart status[2]
Title	Full chart name
Edition	Electronic chart issue date
Last correction date	The date when the chart was last updated and the updating source
Scale	Chart scale
Paper chart	Paper chart number, manufacturer and date of issue
Updated to (date)	Date and ID of a media which was used for the latest updating of TX-97 or SENC chart collection

[2] – if more than two weeks have passed between the current date and the date specified in the “Updated to (date)” column, the chart obtains the “Outdated” status, otherwise the chart has “Up-to-date” status.

Information on Chart Objects

A large number of chart objects on small screen area does not allow the display of all their associated information. With the use of Info function, a free cursor for performing “acquisition” function appears in the chart area. A press on the left trackball/mouse button in the bottom part of the screen opens up “Info” panel, which displays available information on the “acquired” objects both in text and graphic form.

Information panel displays a list of acquired objects. To view the data, selected the required object from the list.

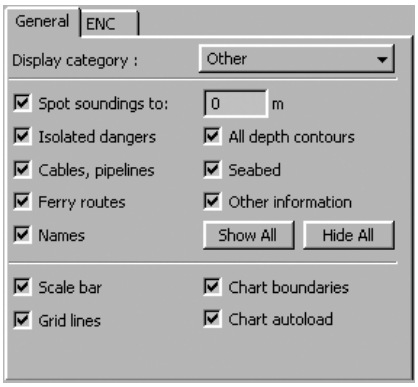
Ship Collection Chart Control

Layers Control

In compliance with requirements of IEC 61174 and S-52 standards, the CA implements a capability to select the display of various chart information categories:

- “Base” display includes classes of information whose display must not be turned off in any circumstances whatsoever;
- “Standard” display includes classes of information essential for the navigation and route planning modes;
- “Other” display (“Custom”) includes classes of other information, which was not included in the previous two categories. It is also possible to select the display of difference chart information classes included in this display.

The display of individual classes is controlled from “General” page of “Ship Collection” panel.



Correspondence of the database contents of the TRANSAS ENC's to the IMO Performance Standards for Electronic Chart Display and Information Systems (ECDIS):

- "Base" display:

International Standard IEC 61174	**TX-97 Charts contents**
Coastline	Coastline
Own ship's safety contour	Own ship's safety contour
Indication of isolated underwater dangers of depths less than the safety contour, which lies within the safe waters, defined by the safety contour	Indication of isolated underwater dangers: • wrecks, always dry; • submerged wrecks, depth known; • wrecks showing any portion of hull or superstructure; • wrecks showing masts; • dangerous wrecks, depth unknown; • rocks which do not cover; • rocks which cover and uncover; • rocks awash at level of chart datum; • dangerous underwater rocks of uncertain depth; • dangerous underwater rocks of known depth; • obstructions, depth unknown; • obstructions, least depth known; • stumps, posts, piles; • submerged pile, stake, snag, well, stump; • fishing stakes, fish traps, weirs; • fish haven; • marine farm
Indication of isolated dangers, which lie within the safe water, defined by the safety contour such as bridges, overhead wires, etc., and including buoys and beacons whether or not these are being used as aids to navigation	Indication of isolated dangers: • bridges; • overhead cables; • all types of buoys and beacons
Traffic routing systems	Traffic routing systems: • separation line; • separation zone; • established direction of traffic flow; • recommended direction of traffic flow; • limit of restricted area; • limit of routing measure; • precautionary area; • inshore traffic zone; • deep water route; • two – way route; • area to be avoided
Scale range, orientation and display mode	Scale range, orientation and display mode
Units of depth and height	Units of depth and height from source paper chart

- "Standard" display:

International Standard IEC 61174	**TX-97 Charts contents**
Display Base	Display Base
Drying line	Drying line
Indication of fixed and floating aids to navigation	Indication of fixed and floating aids to navigation, except buoys and beacons, for example: • fog signal; • day mark; • radar reflector, etc.
Boundaries of fairways, channels, etc	Boundaries of fairways, channels, etc.
Visual and radar conspicuous features	Visual and radar conspicuous features

International Standard IEC 61174	TX-97 Charts contents
Prohibited and restricted areas	Prohibited and restricted areas: • anchoring prohibited area; • fishing prohibited area; • nature reserve area; • explosive dumping ground; • dumping ground for chemical waste; • military restricted area
Chart scale boundaries	Chart scale boundaries
Indication of cautionary notes	Indication of cautionary notes from source paper chart
	Ferry routes[3]

- "Other" display ("Custom"):

International Standard IEC 61174	TX-97 Charts contents
Spot soundings	Spot soundings
Submarine cables and pipelines	Submarine cables and pipelines
Ferry routes	Ferry routes[4]
Details of all isolated dangers	Details of all isolated dangers, which have not been included in the Display Base: • value of sounding; • isolated danger type
Details of aids to navigation	Details of aids to navigation (text): • light characteristic; • light colour; • sector limit; • light height; • signal period; • signal sequence; • signal group; • buoy and beacon colour (see standard display)
Contents of cautionary notes	Contents of cautionary notes from source paper chart
ENC edition date	SENC edition date
Geodetic datum	Geodetic datum
Magnetic variation	Magnetic variation
Graticule	Graticule
Place names	Place names from source paper chart

In addition to the information required by the standards the "Other" display includes:

- scale bar;
- grid lines;
- chart boundaries.

[3] – classes of information marked in this way are included in the Standard Display set in accordance with the requirements of the S-52 standard (IHO Specifications for Chart Content and Display Aspects of ECDIS).

[4] – for TX-97 format chart only.

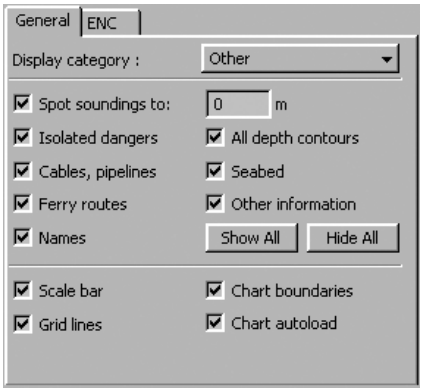
Chart Loading

For an easy search and loading of the required charts, the CA offers two procedures: automatic and manual.

For a clear presentation of the sailing area and work with the chart information, it is necessary to correctly select the navigational charts and their scale. This kind of selection can be made automatically and manually.

Chart Autoloading

Chart autoloading is a special CA function, which allows the automatic display of the chart optimum in regard of its position and scale, and defines this chart as the current chart. To turn this function on, check Chart autoload checkbox on “General” page of “Ship Collection” panel.



Manual Chart Loading

The manual method of chart loading requires the operator to select the charts him/herself in one of the two windows adapted for the search of charts. The selection can be made from the list of the entire ship collection.

The manual method of chart loading requires the operator to select the charts him/herself in one of the two windows adapted for the search of charts.

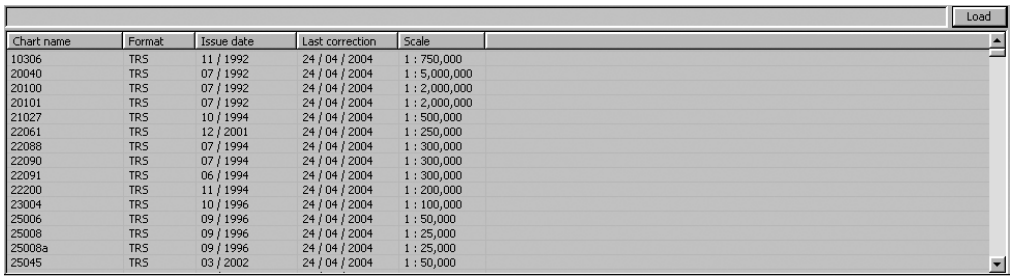


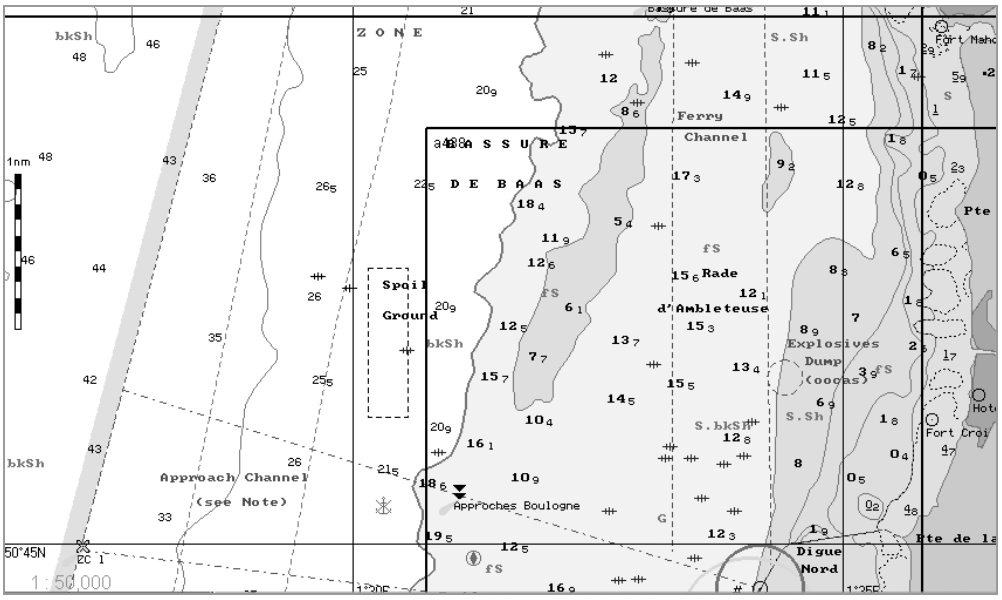
Chart name	Format	Issue date	Last correction	Scale
10306	TRS	11 / 1992	24 / 04 / 2004	1 : 750,000
20040	TRS	07 / 1992	24 / 04 / 2004	1 : 5,000,000
20100	TRS	07 / 1992	24 / 04 / 2004	1 : 2,000,000
20101	TRS	07 / 1992	24 / 04 / 2004	1 : 2,000,000
21027	TRS	10 / 1994	24 / 04 / 2004	1 : 500,000
22061	TRS	12 / 2001	24 / 04 / 2004	1 : 250,000
22088	TRS	07 / 1994	24 / 04 / 2004	1 : 300,000
22090	TRS	07 / 1994	24 / 04 / 2004	1 : 300,000
22091	TRS	06 / 1994	24 / 04 / 2004	1 : 300,000
22200	TRS	11 / 1994	24 / 04 / 2004	1 : 200,000
23004	TRS	10 / 1996	24 / 04 / 2004	1 : 100,000
25006	TRS	09 / 1996	24 / 04 / 2004	1 : 50,000
25008	TRS	09 / 1996	24 / 04 / 2004	1 : 25,000
25008a	TRS	09 / 1996	24 / 04 / 2004	1 : 25,000
25045	TRS	03 / 2002	24 / 04 / 2004	1 : 50,000

To make the search easier this list can be sorted in the ascending/descending order of the following chart characteristics:

- chart name;
- issue date;
- last correction;
- scale.

Autoscale

Each chart has its original scale. To set the required scale and support the scale uniformity in case of the chart multi-loading, the scaling function is provided. This function has manual and automatic setting modes. The scale set on the CA screen is displayed in the left-hand part of the screen in the digital and graphic form (scale bar).



Automatic Scaling

The automatic scaling enables the display of a chart loaded in the autoload mode on its original scale.

Manual Setting of Scale

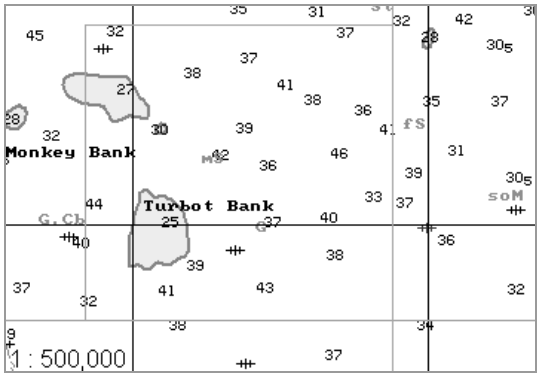
The manual setting of chart display scale is set by using <+> and <-> hot keys or buttons on the Chart Display Area. As this is done, the current chart scale alters by one fixed scale value.

Autoscroll

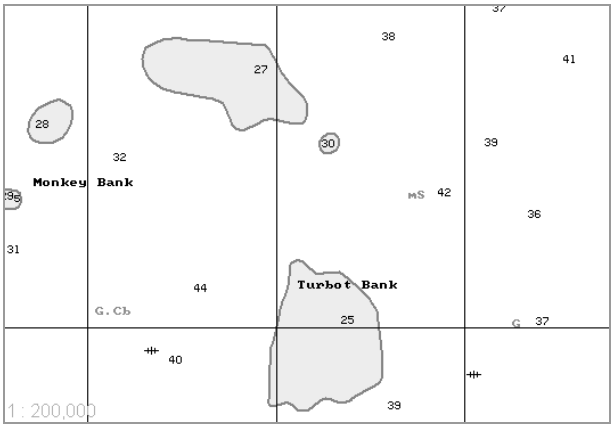
The capability to view charts in the area far away from the own ship position symbol is implemented in View function (turned on by pressing button in the Chart Display Area). It turns on the graphic cursor moved around the CA screen with the mouse/trackball. As the cursor goes beyond the screen boundaries, the current and/or adjacent charts will be re-drawn around the central point determined by the cursor coordinates. The cursor position is displayed in the right bottom part of the screen.

Zoom

The capability to display the necessary chart fragment or sailing area is implemented by Zoom function (turned on by pressing button in the Chart Display Area). With Zoom function ON, the operator selects the required sailing area on the Chart Display Area keeping the left mouse button depressed.

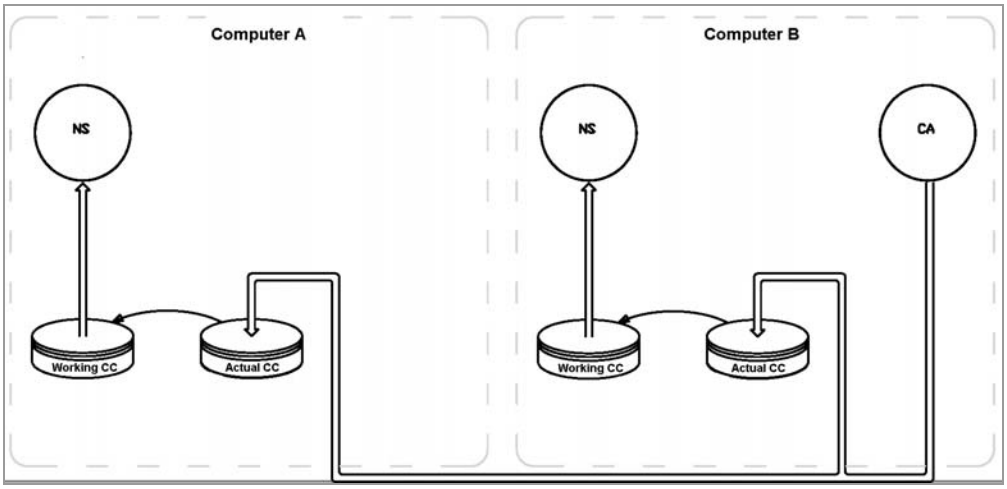


After the left trackball/mouse button is pressed, the CA automatically set the scale to such fixed scale value, which will enable the selected sailing area to be fully displayed on the Chart Display Area. At the same time the chart will be loaded on the scale closest to the fixed scale value set in the CA.



Principles of Handling Chart Collection in the Network Configuration

The ship chart collection is created with the aid of the CA at any computer. Only one CA application can be run at all the workstations. A press on Create new collection/Update clients button creates an actual chart collection, which is networked to all the workstations. All the stations, therefore, have identical chart collections. INS tasks operates with the working chart collection. After the networking of an actual chart collection to all the computers, its is equalised with the working chart collection. The operation with the chart collection is presented in the diagram below.



After the changes have been made in the chart collection by using the CA (installation of new charts or their updating, chart deleting), a press on Create new collection/Update clients button forms a new actual chart collection, which is then networked to all the workstations.

WARNING!

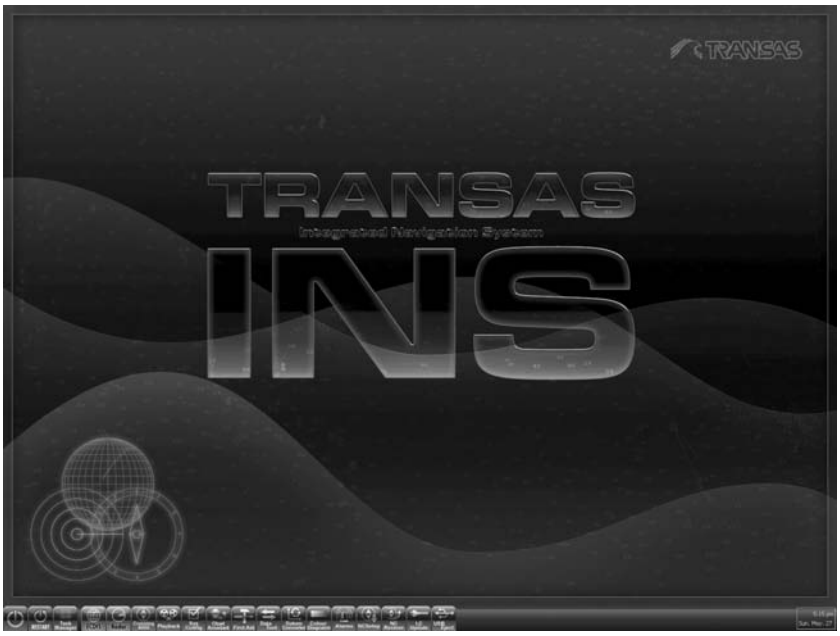
No changes will be made in the ship collection after the chart installation/update until the Create new collection/Update clients button is pressed.

If any of the computers is turned off the time of actual chart collection networking, after it has been switched on, the actual chart collection should be updated by pressing Create new collection/Update clients button of CA application.

USER MANUAL

Chart Assistant Start/Stop Operations

Press button for run Cart Assistant utility.



Select the mode of operation with Chart Assistant utility.

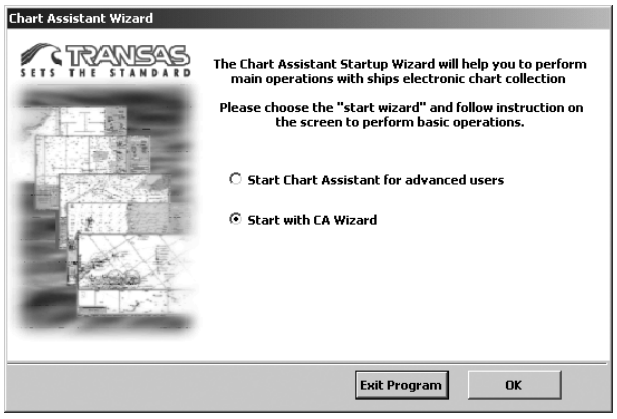


Chart Assistant Wizard
TRANSAS
SETS THE STANDARD
The Chart Assistant Startup Wizard will help you to perform main operations with ships electronic chart collection
Please choose the "start wizard" and follow instruction on the screen to perform basic operations.
Start Chart Assistant for advanced users
Start with CA Wizard
Exit Program
OK

As the “Start with CA Wizard” mode is selected, the program provides step-by-step directions for the performance of the following operations:

- installation of data (charts, correction, permits, etc.);
- generation of a report on the current collection status or changes in the collection;
- generation of a request for the receipt of chart corrections or chart catalogue;
- generation of a request for the purchase of new charts (for the chart selection the CA is required to be run).

This mode will be detailed below in paragraph Work with CA Wizard.

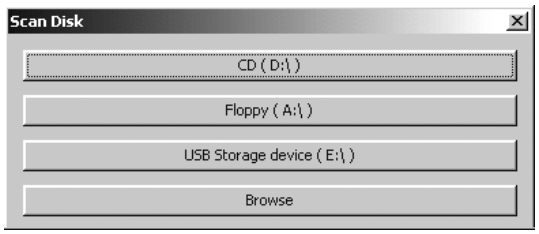
It is further assumed that the “Start Chart Assistant for Advanced Users” mode has been selected.

To exit from the Chart Assistant utility press the “Exit” button in the button area or ✕ button on the top right corner of the “Chart Assistant” window.

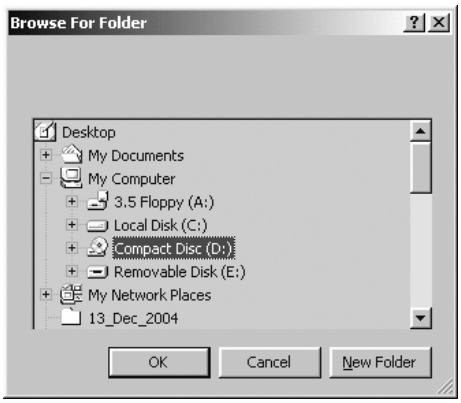
Installing Licenses

Installing a Permit from an External Carrier

Press License button. In the “Scan Disk” window, which will open up, specify the external storage containing licenses.

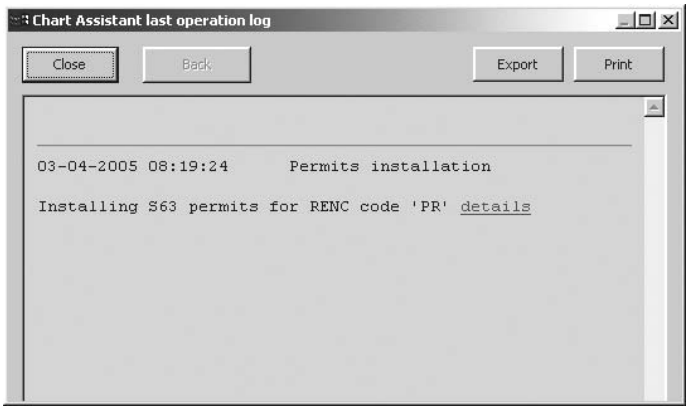


If necessary press “Browse” button and specify the path to the directory, which contains the permit.



Press “OK” button in the search window.

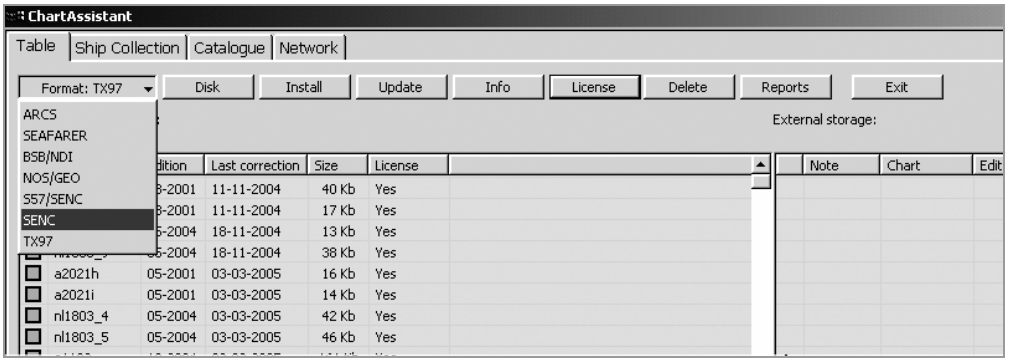
The CA will scan the content of the external storage, will automatically identify the type of data and install the licenses contained in the carrier. The permit installation log window will be displayed:



Close the log. The permit installation process is completed.

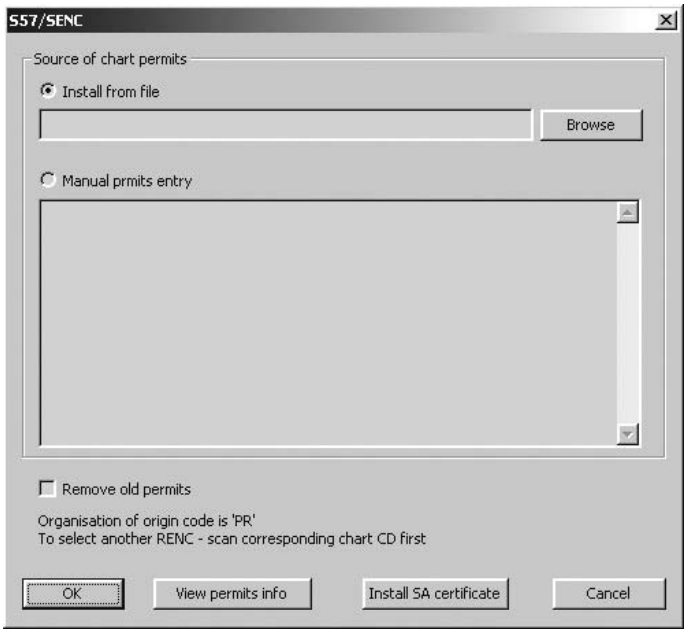
Advanced permit Installation

For S57, Seafarer and ARCS format charts, there is a capability to install permits with different permit installation options. On the “Table” or “Ship Collection” panel press Format button.



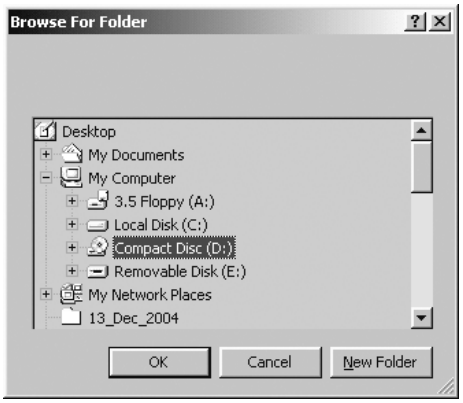
Select of the require chart format.

Press License button.



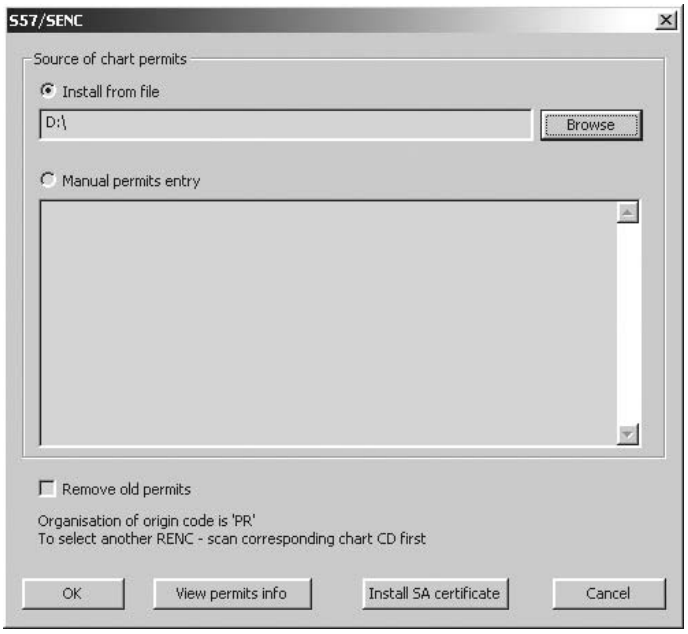
To install permits from external carrier check Install from file checkbox.

Press “Browse” button and specify the path to the folder, which contains cell permit files.

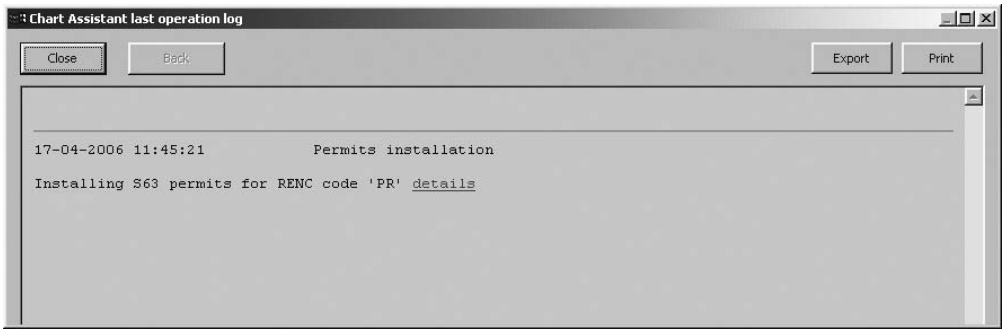


Press “OK” button.

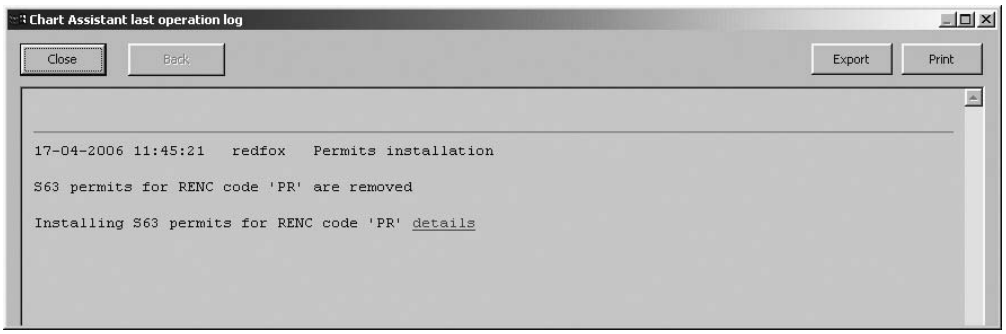
Note: To handle the situation with multiple ENC cell permits data providers, (DATA SERVERS) the permits from different data servers are stored separately, according to the identifier of the data server in `SERIAL.ENC` file on ENC data CD or according to the server code in `permits.txt` file (if exists). If no identification of the data provider is found (i.e. no CD is loaded and there is no data server code in `permit.txt`) CA identifies PRIMAR-STAVANGER (data server code is PM) as origin of cell permits.



Press “OK” button to confirm the installation of chart permits. The permit installation log will be displayed.

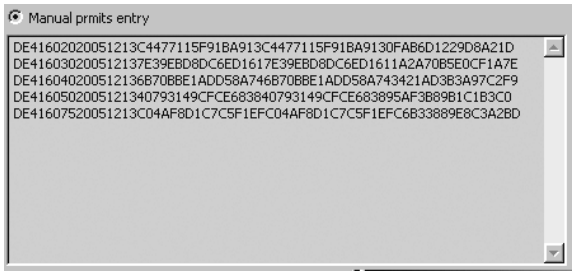


To delete previously installed cell permits from certain data server, check the checkbox Remove old permits and press “OK” button. The permit installation log will be displayed.



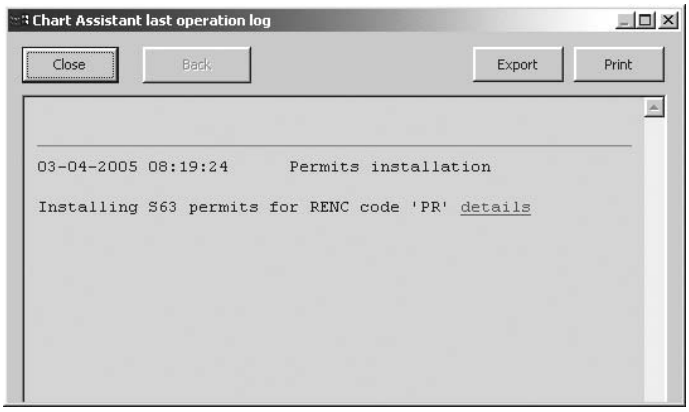
In this case all permits from the data server will be deleted or substituted with new permits.

To install permits manually check Manual permits entry checkbox. Enter the number of the permit corresponding to the dongle.



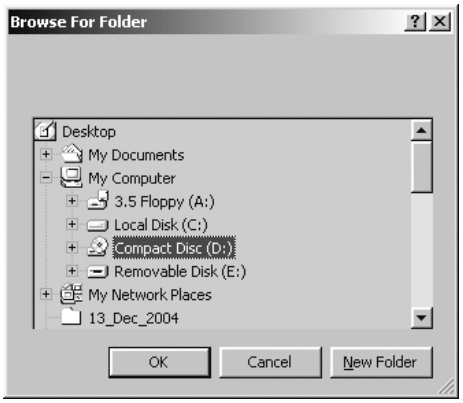
Press “OK” button to confirm the installation of chart permits.

The permit installation log will be displayed.



Close the log window. The permit installation process is completed.

To install SA certificate from external carrier check Install SA certificate button and specify the path to the folder, which contains cell permit files.



Press “OK” button.

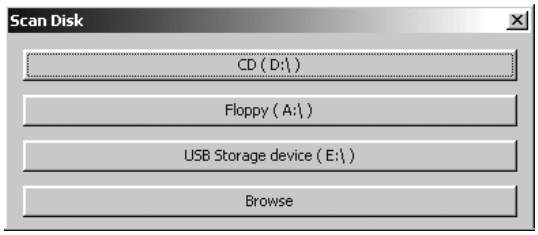
Press “OK” button. The SA certificate installation process is completed.

Installing Charts

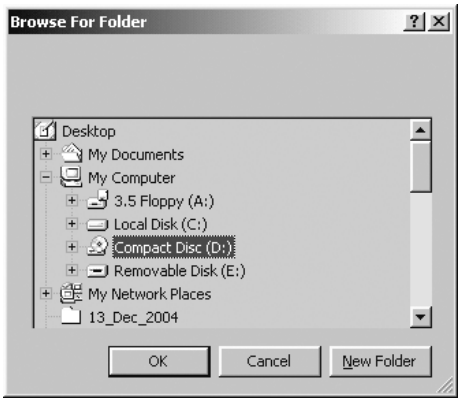
Disk Scanning

Insert the CD with a chart folio into the CD drive. Press Disk button.

In the “Scan Disk” window, which will open up, specify the external storage containing chart collection.

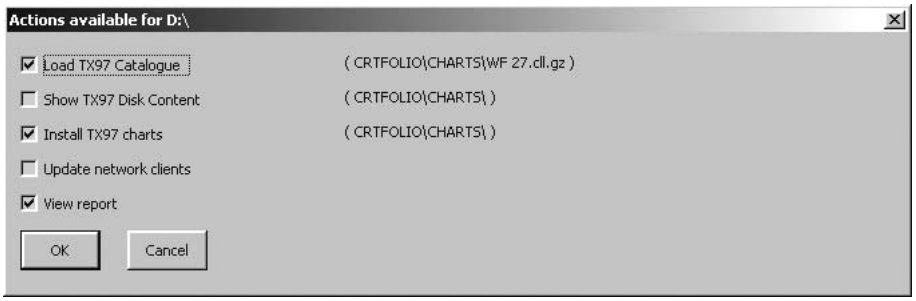


If necessary press “Browse” button and specify the path to the directory, which contains the chart collection.



Press “OK” button in the search window.

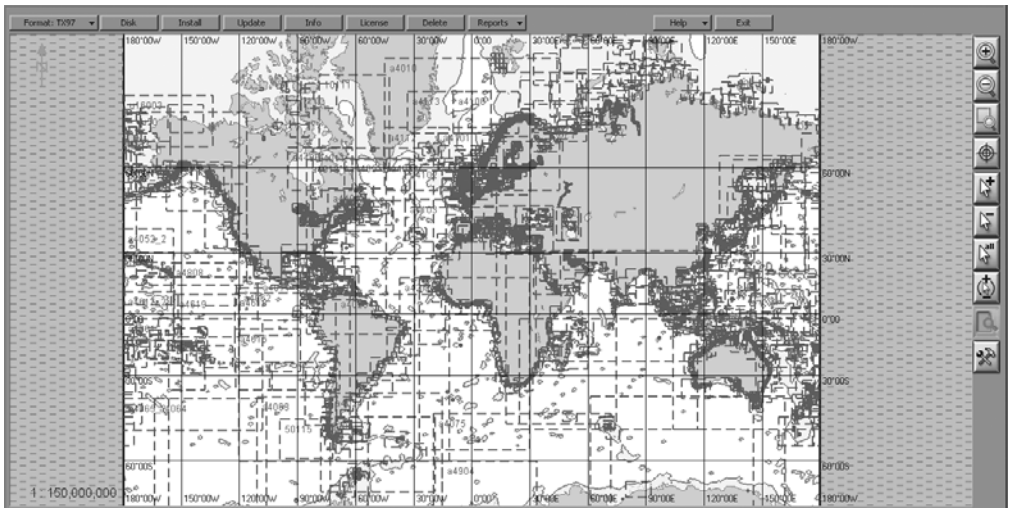
CA will scan the external storage, will automatically identify the chart format and type of data it contains, and will produce a list of available actions.



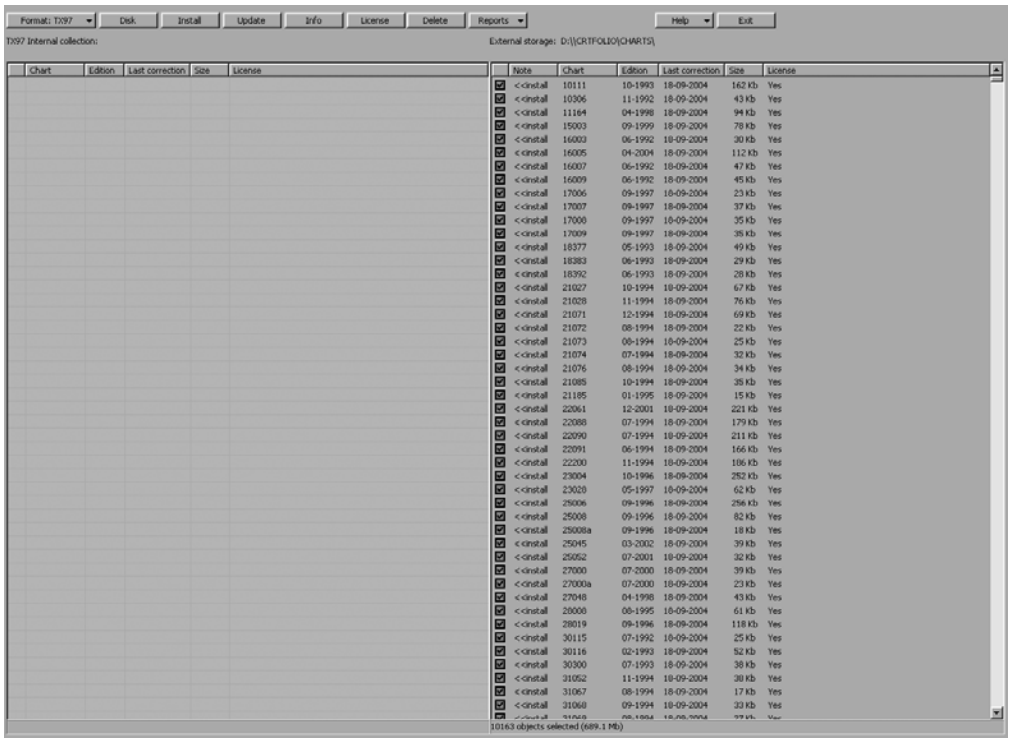
Select the necessary actions and press “OK” button.

Note: If Install TX97 charts option is selected, all the charts contained on the disk which the licenses are available for, will be automatically installed. If Show TX97 Disk Content option is selected, the screen will display a list of charts for the further selection and installation of necessary charts in the manual mode.

As Show TX97 Disk Content option is selected, after the end of the scanning process “Ship Collection” panel displays dashed outlines of all the charts found on the CD.



In “Table” panel these charts are shown in the right-hand part of the table.



Selecting Charts

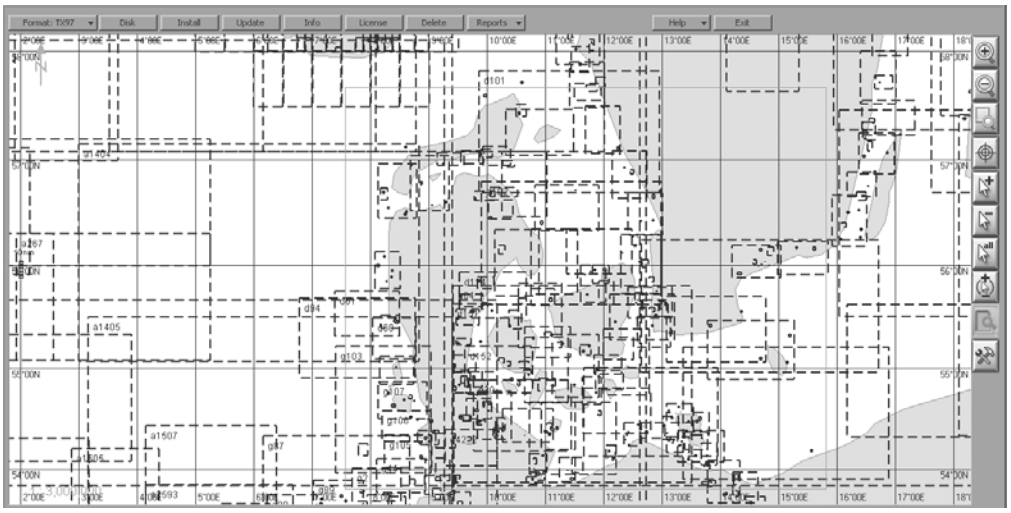
After the CD scanning, all the charts are by default selected for installation (chart outlines are shown in the red dashed lines). To install charts for a certain area, perform the selection inverting. Press and then buttons.

Chart selection will be toggled, i.e. all the charts will become unselected (chart outlines are shown in the black dashed lines).

Select the charts required for installation by using one of the two procedures.

Chart Selection on Ship Collection Panel

On “Ship Collection” panel, press the button. By keeping the left mouse/trackball button depressed set the sailing area on the Chart Display Area, which charts are required to be installed for.



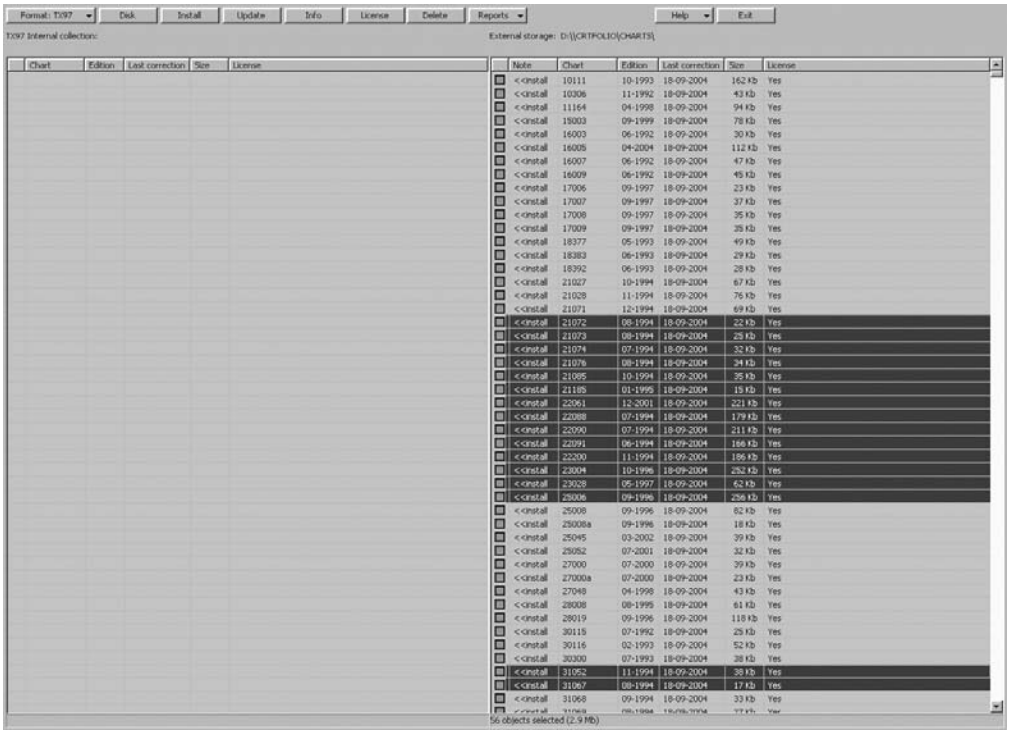
Press left mouse/trackball button. Outlines of charts, which fall within the set area, are shown in the red coloured dashed line.

To select one chart, position the cursor on its boundary and double click the left mouse/trackball button. Outlines of chart are shown in the red coloured dashed line.

Chart selection is completed.

Chart Selection on Table Panel

On “Table” panel, select the charts required to be installed by keeping <Ctrl> key depressed. To select several charts in a row, specify the first and the last chart keeping <Shift> key depressed.



The selected charts will be displayed against the coloured background. After the chart selection, it is necessary to check a checkbox next to the name of any selected chart, checkboxes for other selected charts will be checked automatically. Chart selection is completed.

Chart Installation

After the chart selection, perform their installation. To do this press Install button.

General chart installation log is displayed:

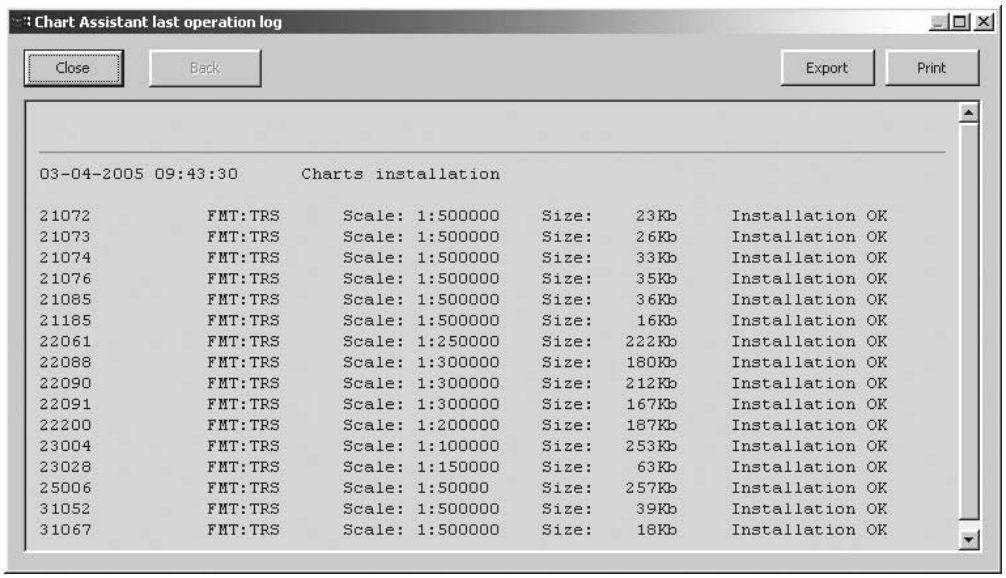
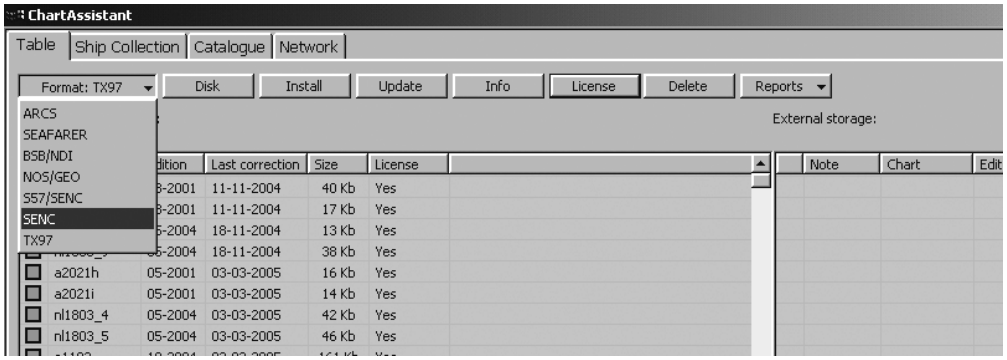


Chart Assistant last operation log
Close
Back
Export
Print
03-04-2005 09:43:30 Charts installation
21072 FMT:TRS Scale: 1:500000 Size: 23Kb Installation OK
21073 FMT:TRS Scale: 1:500000 Size: 26Kb Installation OK
21074 FMT:TRS Scale: 1:500000 Size: 33Kb Installation OK
21076 FMT:TRS Scale: 1:500000 Size: 35Kb Installation OK
21085 FMT:TRS Scale: 1:500000 Size: 36Kb Installation OK
21185 FMT:TRS Scale: 1:500000 Size: 16Kb Installation OK
22061 FMT:TRS Scale: 1:250000 Size: 222Kb Installation OK
22088 FMT:TRS Scale: 1:300000 Size: 180Kb Installation OK
22090 FMT:TRS Scale: 1:300000 Size: 212Kb Installation OK
22091 FMT:TRS Scale: 1:300000 Size: 167Kb Installation OK
22200 FMT:TRS Scale: 1:200000 Size: 187Kb Installation OK
23004 FMT:TRS Scale: 1:100000 Size: 253Kb Installation OK
23028 FMT:TRS Scale: 1:150000 Size: 63Kb Installation OK
25006 FMT:TRS Scale: 1:50000 Size: 257Kb Installation OK
31052 FMT:TRS Scale: 1:500000 Size: 39Kb Installation OK
31067 FMT:TRS Scale: 1:500000 Size: 18Kb Installation OK

Close the log. Chart installation process is completed.

Updating

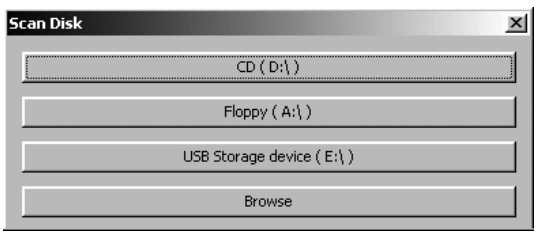
Press Format button.



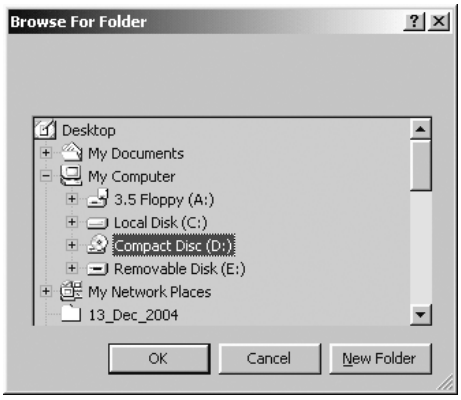
Select necessary chart format, the panel will display outlines of all the previously installed charts in the set format.

Insert the CD with a chart updating into the CD drive. Press Update button.

In the “Scan Disk” window, which will open up, specify the external storage containing the updating.

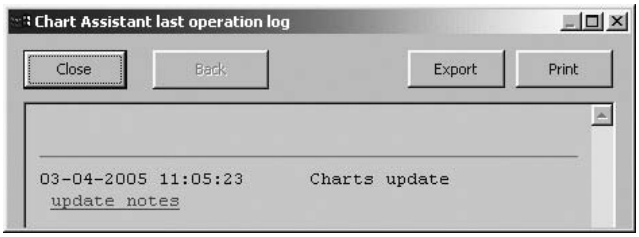


If necessary press “Browse” button and specify the path to the directory, which contains the chart updating.



Press “OK” button in the search window.

Press “OK” button to confirm the installation of updating for the ship chart folio.

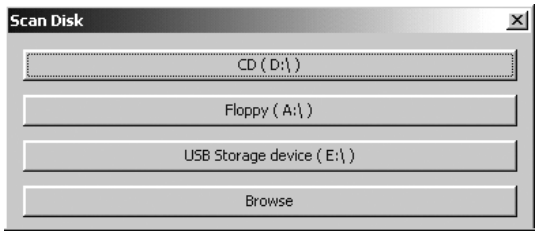


General updating log is displayed.

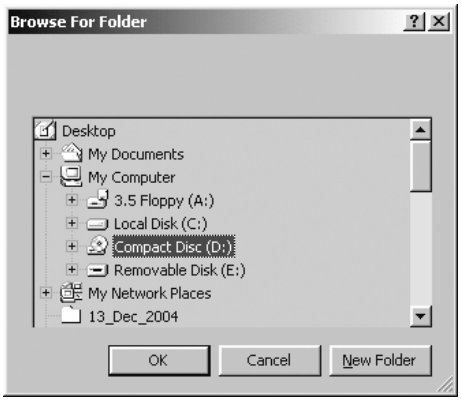
Close the log. The chart updating process is completed.

There is another way to install the updating. Press Disk button.

In the “Scan Disk” window, which will open up, specify the external storage containing the updating.

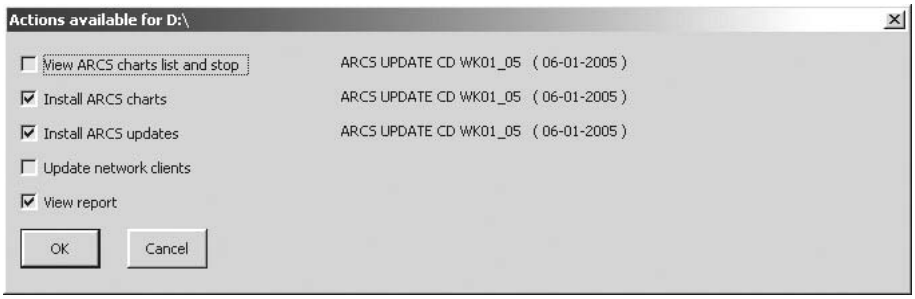


If necessary press “Browse” button and specify the path to the directory, which contains the chart updating.

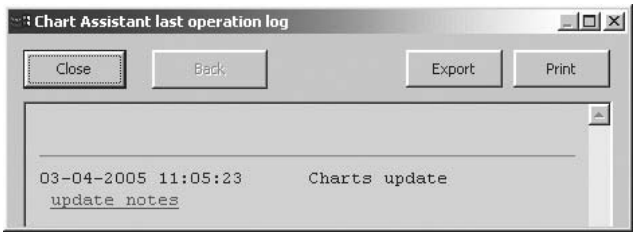


Press “OK” button in the search window.

The CA will scan the external storage, will automatically identify the chart format and the type of data it contains, and will produce a list of available actions.


Actions available for D:\
View ARCS charts list and stop
Install ARCS charts
Install ARCS updates
Update network clients
View report
ARCS UPDATE CD WK01_05 (06-01-2005)
ARCS UPDATE CD WK01_05 (06-01-2005)
ARCS UPDATE CD WK01_05 (06-01-2005)
OK
Cancel

Select the “Install updates” action and press “OK” button.

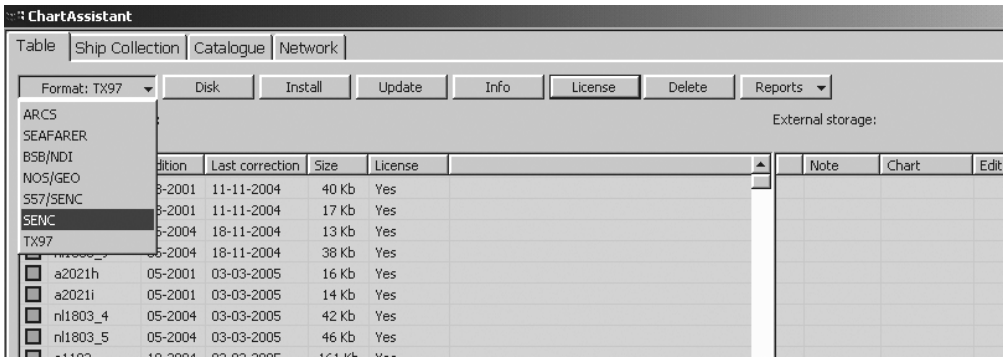


General updating log is displayed.

Close the log. The chart updating process is completed.

Deleting Charts

Press Format button.



Select necessary chart format, the panel will display outlines of all the previously installed charts in the set format.

By graphical or tabular method select charts required to be deleted (see paragraph above). Press Delete button.

Confirmation window is displayed.

Press “OK” button to delete the selected charts.

The charts are no more displayed on the utility panels, and the deleting log window appears.

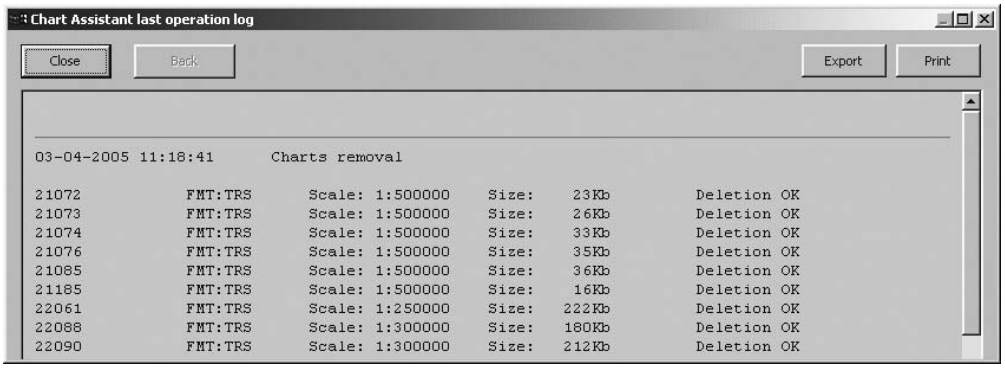
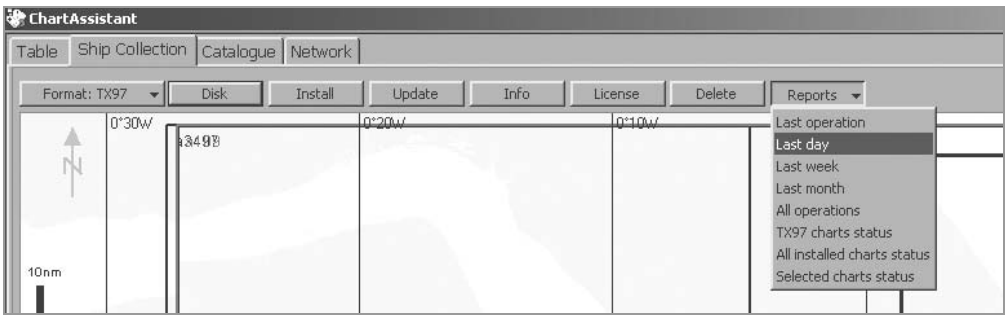


Chart Assistant last operation log
Close
Back
Export
Print
03-04-2005 11:18:41 Charts removal
21072 FMT:TRS Scale: 1:500000 Size: 23Kb Deletion OK
21073 FMT:TRS Scale: 1:500000 Size: 26Kb Deletion OK
21074 FMT:TRS Scale: 1:500000 Size: 33Kb Deletion OK
21076 FMT:TRS Scale: 1:500000 Size: 35Kb Deletion OK
21085 FMT:TRS Scale: 1:500000 Size: 36Kb Deletion OK
21185 FMT:TRS Scale: 1:500000 Size: 16Kb Deletion OK
22061 FMT:TRS Scale: 1:250000 Size: 222Kb Deletion OK
22088 FMT:TRS Scale: 1:300000 Size: 180Kb Deletion OK
22090 FMT:TRS Scale: 1:300000 Size: 212Kb Deletion OK

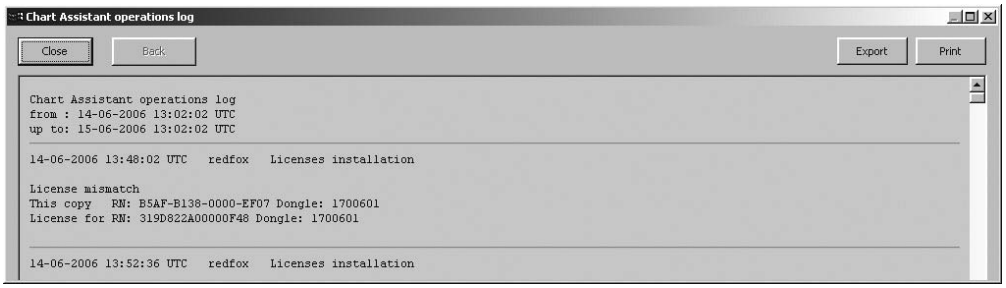
Close the log. The deleting process is completed.

Viewing Operations Log

Press Reports button.



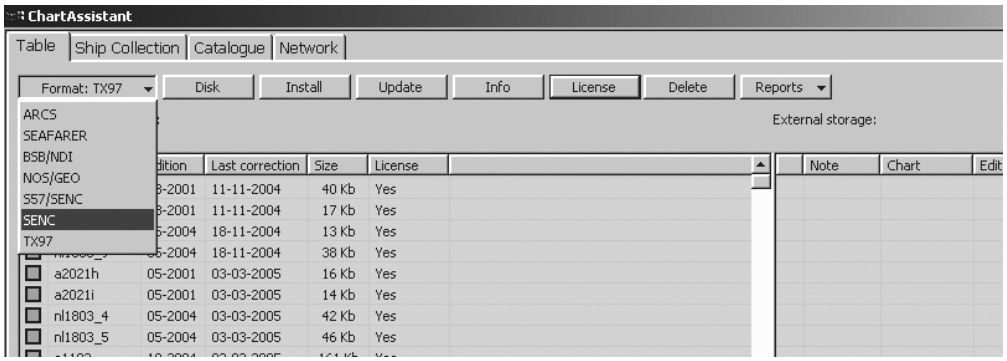
Select the necessary report from the list.



View the archive log. Press “Close” button to close “Chart Assistant operations log” window.

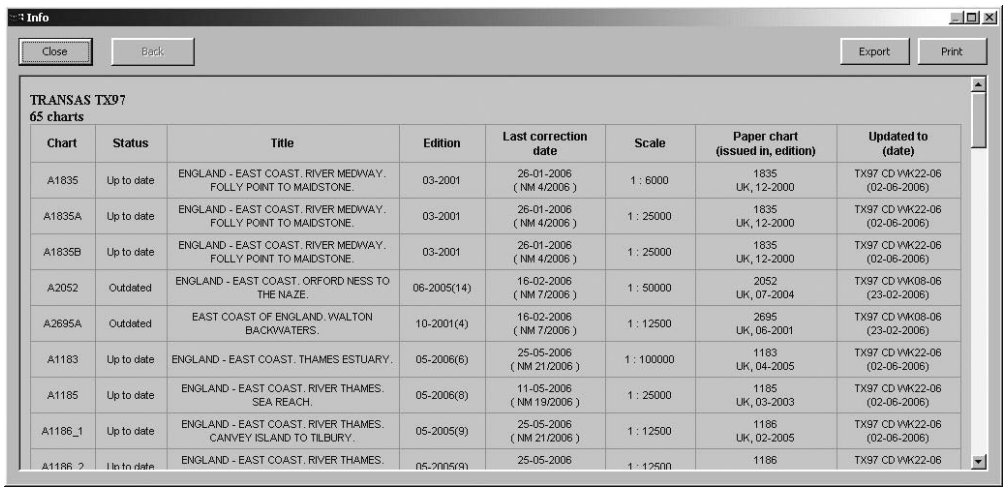
Obtaining Information on Charts

Press Format button.



Select necessary chart format, the panel will display outlines of all the previously installed charts in the set format.

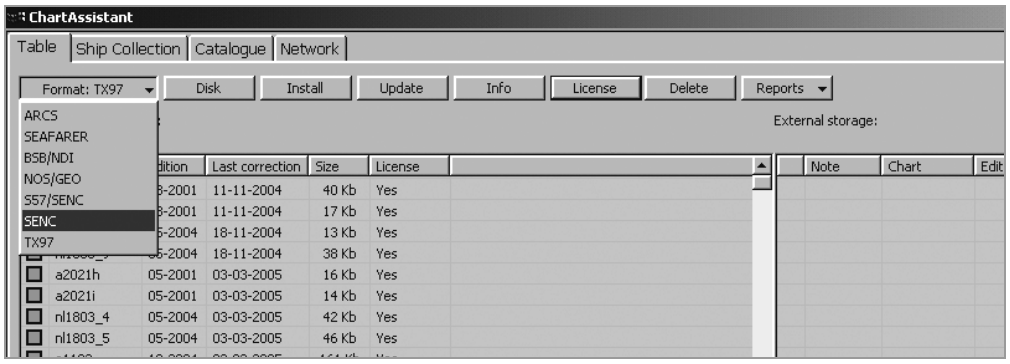
By graphical or tabular method select charts, which information should be obtained on (see paragraph above). Press Info button.


Info
Close
Back
Export
Print
TRANSAS TX97
65 charts
Chart | Status | Title | Edition | Last correction date | Scale | Paper chart (issued in, edition) | Updated to (date)
A1835 | Up to date | ENGLAND - EAST COAST. RIVER MEDWAY. FOLLY POINT TO MAIDSTONE. | 03-2001 | 26-01-2006 (NM 4/2006) | 1 : 6000 | 1835 UK, 12-2000 | TX97 CD WK22-06 (02-06-2006)
A1835A | Up to date | ENGLAND - EAST COAST. RIVER MEDWAY. FOLLY POINT TO MAIDSTONE. | 03-2001 | 26-01-2006 (NM 4/2006) | 1 : 25000 | 1835 UK, 12-2000 | TX97 CD WK22-06 (02-06-2006)
A1835B | Up to date | ENGLAND - EAST COAST. RIVER MEDWAY. FOLLY POINT TO MAIDSTONE. | 03-2001 | 26-01-2006 (NM 4/2006) | 1 : 25000 | 1835 UK, 12-2000 | TX97 CD WK22-06 (02-06-2006)
A2052 | Outdated | ENGLAND - EAST COAST. ORFORD NESS TO THE NAZE. | 06-2005(14) | 16-02-2006 (NM 7/2006) | 1 : 50000 | 2052 UK, 07-2004 | TX97 CD WK08-06 (23-02-2006)
A2695A | Outdated | EAST COAST OF ENGLAND. WALTON BACKWATERS. | 10-2001(4) | 16-02-2006 (NM 7/2006) | 1 : 12500 | 2695 UK, 06-2001 | TX97 CD WK08-06 (23-02-2006)
A1183 | Up to date | ENGLAND - EAST COAST. THAMES ESTUARY. | 05-2006(6) | 25-05-2006 (NM 21/2006) | 1 : 100000 | 1183 UK, 04-2005 | TX97 CD WK22-06 (02-06-2006)
A1185 | Up to date | ENGLAND - EAST COAST. RIVER THAMES. SEA REACH. | 05-2006(8) | 11-05-2006 (NM 19/2006) | 1 : 25000 | 1185 UK, 03-2003 | TX97 CD WK22-06 (02-06-2006)
A1186_1 | Up to date | ENGLAND - EAST COAST. RIVER THAMES. CANVEY ISLAND TO TILBURY. | 05-2005(9) | 25-05-2006 (NM 21/2006) | 1 : 12500 | 1186 UK, 02-2005 | TX97 CD WK22-06 (02-06-2006)
A1186_2 | Up to date | ENGLAND - EAST COAST. RIVER THAMES. | 05-2005(9) | 25-05-2006 | 1 : 12500 | 1186 | TX97 CD WK22-06

Press Close button to close “Info” window.

Obtaining Information on Chart Objects

Press Format button.

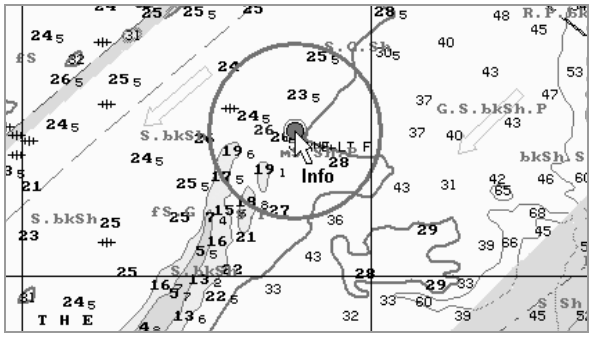


Select necessary chart format, the panel will display outlines of all the previously installed charts in the set format.

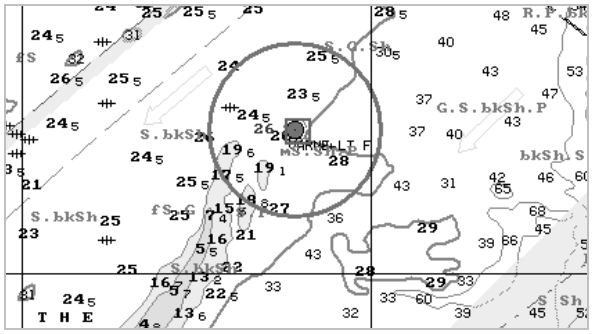
Obtaining Information on Point Type Objects

Set the display of the required chart area on “Ship Collection” or “Catalogue” panels by using scaling and centring functions. Press right trackball button and select “Info” cursor from context menu.

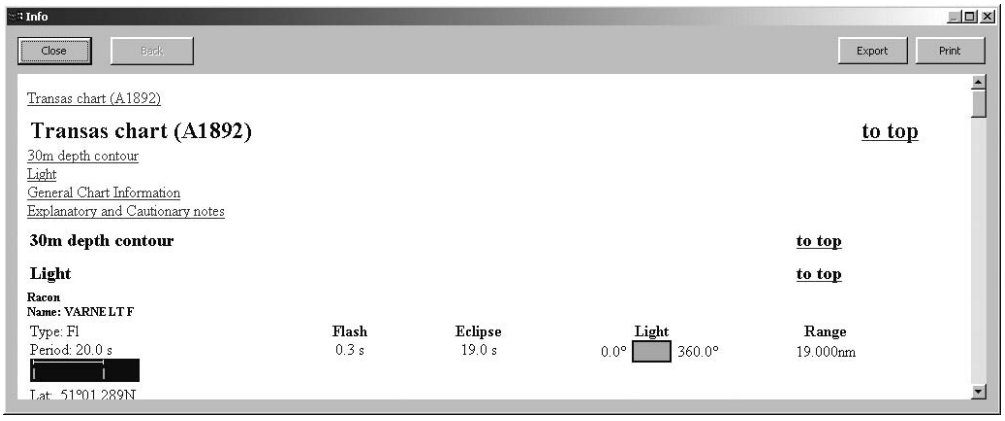
Position the “Info” cursor on the object which information is required to be obtained on.



Press left trackball button, acquisition marker will appear. Position the acquisition marker on the object.



Press the left mouse/trackball button. Info panel will display (under the chart name) the list of pages with available information on the objects, which fall within the acquisition marker outline.

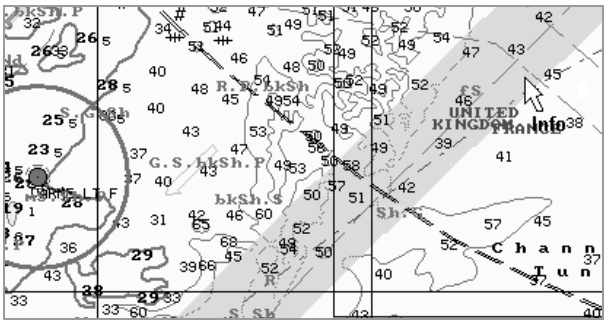


Select the necessary notation by positioning the cursor on the name and press the left mouse/trackball button: Info panel will open a page with information on the selected objects.

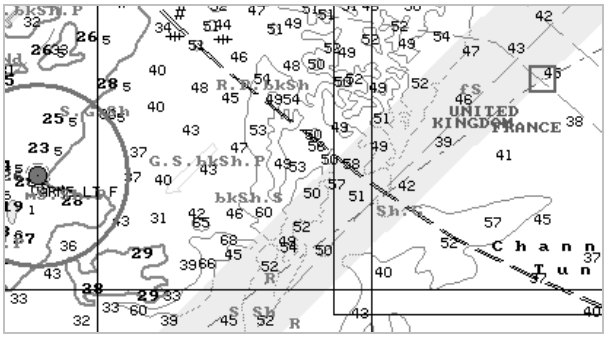
Obtaining Information on Line and Area Type Objects

Set the display of the required chart area on “Ship Collection” or “Catalogue” panels by using scaling and centering functions. Press the right trackball button and select “Info” cursor from the context menu.

Position the “Info” cursor on the object which information is required to be obtained on.

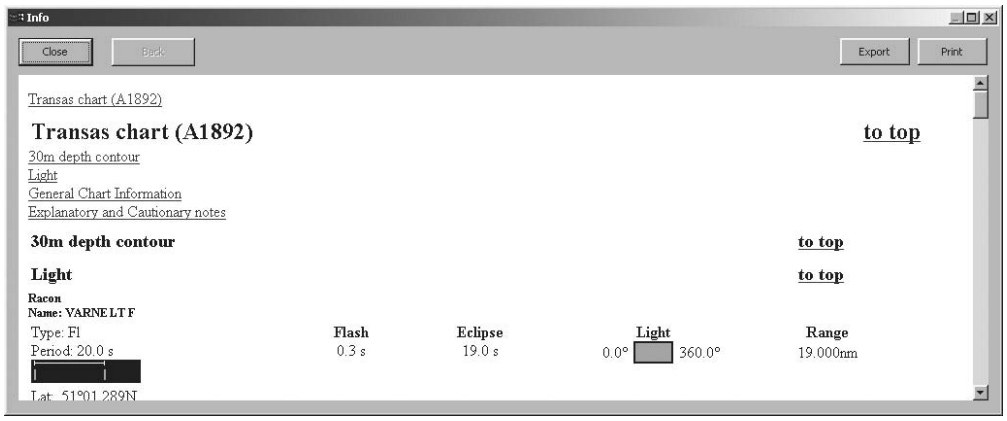


Press the left trackball button, acquisition marker will appear. Position the acquisition marker on the boundary of an area type object or any part of a line type object.



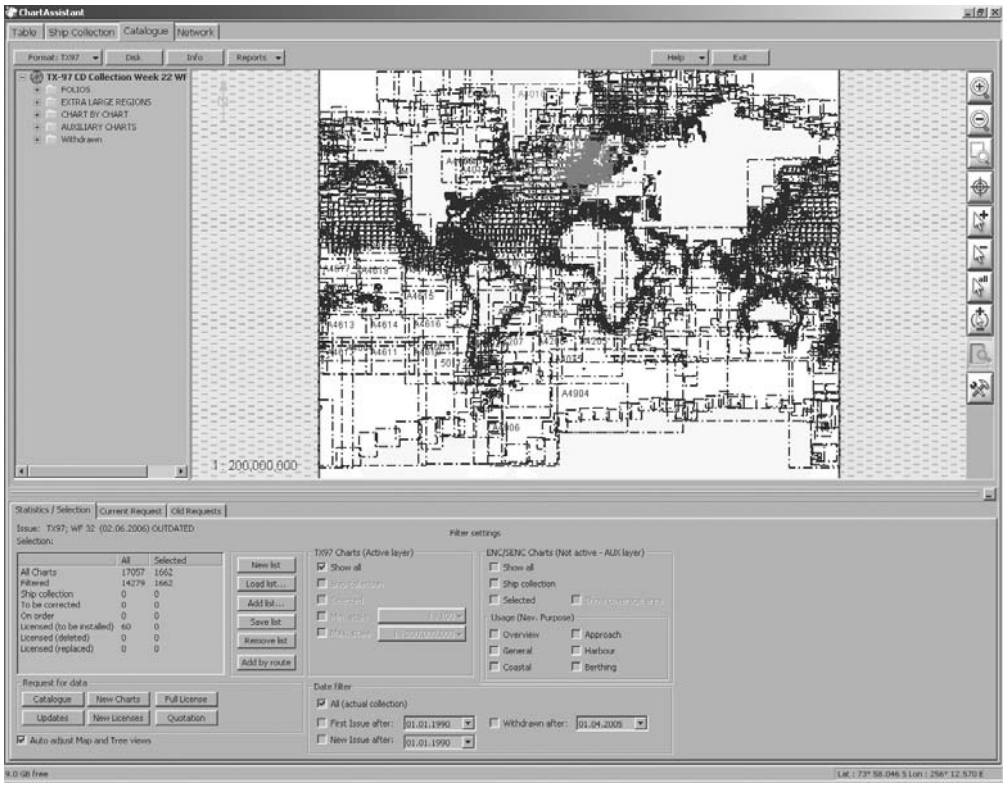
Press the left mouse/trackball button. Info panel will display (under the chart name) the list of pages with available information on the objects, which fall within the acquisition marker outline.

Select the necessary notation by positioning the cursor on the name and press the left mouse/trackball button: Info panel will open a page with information on the selected objects.



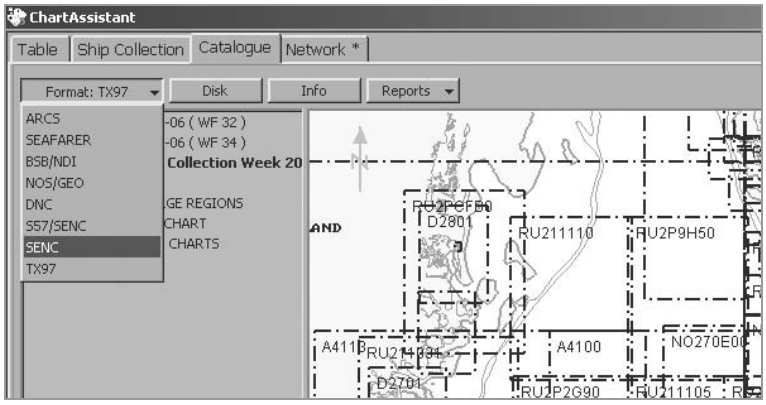
Ordering Data in On-line Mode

Use the tab in the top left part of the screen to switch to “Catalogue” panel.



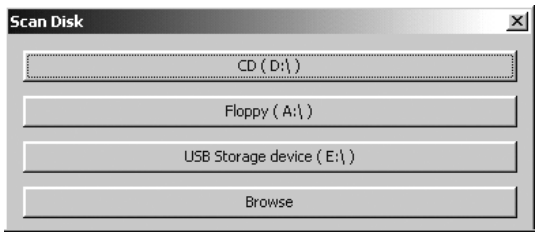
Loading Chart Catalogue

By default, the last saved catalogue of TX-97 format charts is loaded.
Press Format button.

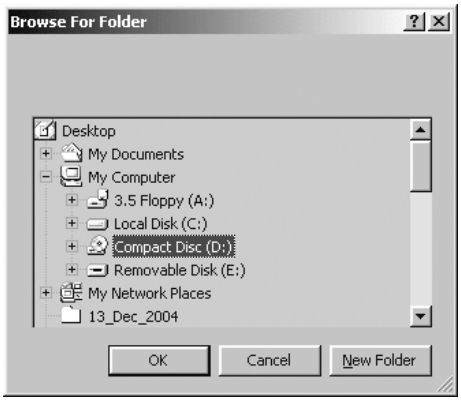


Select the necessary chart format (TX-97 and SENC only for the time being), the panel will display outlines of all the charts in the set format.

To install the catalogue from an external storage, press Disk button. In the “Scan Disk” window, which will open up, specify the external storage containing the catalogue.

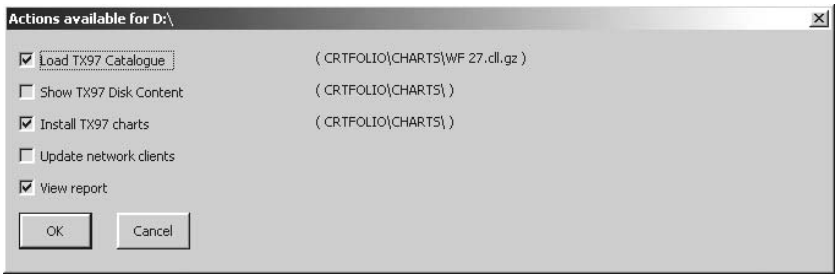


If necessary press “Browse” button and specify the path to the directory, which contains the chart catalogue.



Press “OK” button in the search window.

The CA will scan the external storage, will automatically identify the type of data it contains, and will produce a list of available actions.



Select the Load Catalogue action and press “OK” button.

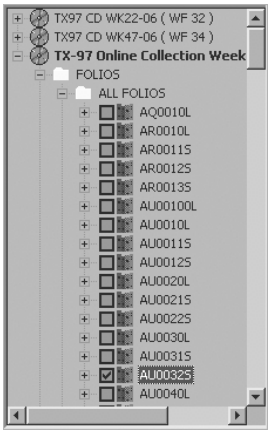
The selected catalogue will be loaded.

To load the latest catalogue which was ever saved in the memory, press Latest Catalogue button in the Buttons Area.

Compiling List of Charts and Chart Folios for Order

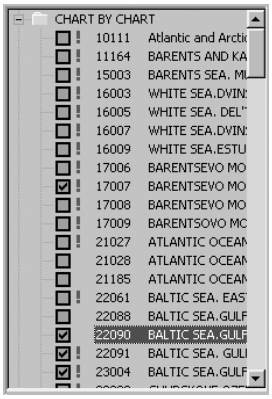
Selecting Charts and Chart Folios from Catalogue Tree

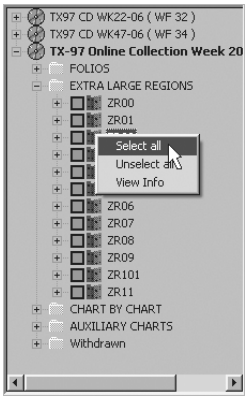
Open the necessary folder in the catalogue tree. Check the checkboxes next to the names of chart folios or regions which should be selected.



To select charts, open folders or chart folios containing charts. Check the checkboxes next to the names of chart folios which should be selected.

You can also select a chart folio from the context menu opened by pressing the right mouse/trackball button.

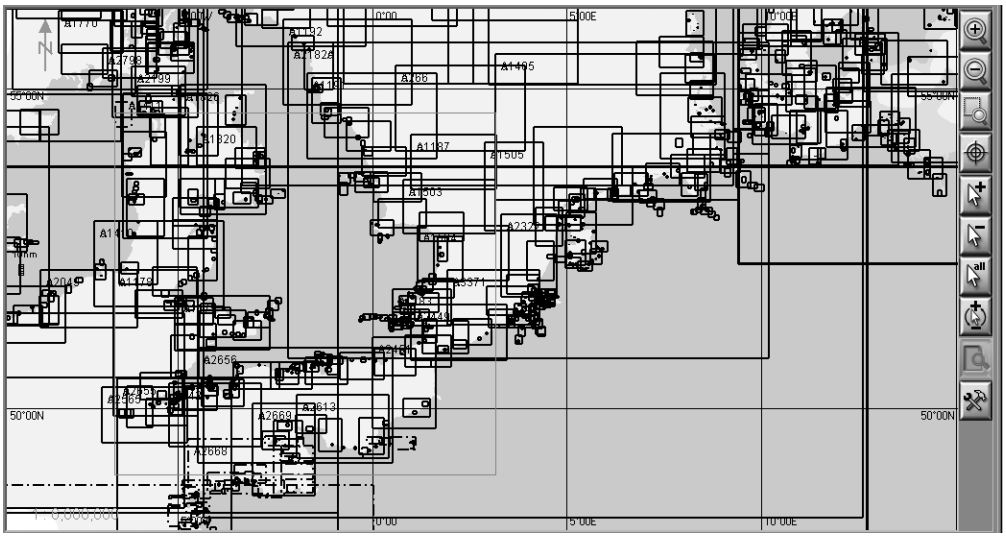




With Auto adjust Map and Tree views function ON, the selected chart folios and charts are displayed on the chart panel. In any case, boundaries of the selected charts are shown in red colour.

Selecting Charts on Chart Panel

Press button. By keeping the left mouse/trackball button depressed set the necessary area on the Chart Display Area, which charts are required to be selected for.

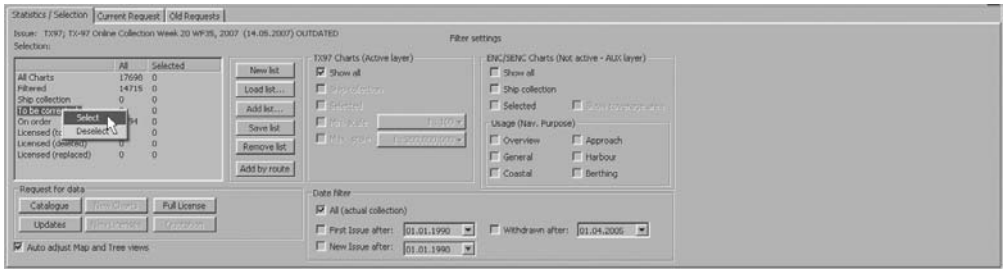


Press left mouse/trackball button. Outlines of charts, which fall within the set area, are shown in the red coloured dashed line.

To select one chart, position the cursor on its boundary and double click the left mouse/trackball button. Outlines of chart are shown in the red coloured dashed line. With Auto adjust Map and Tree views function ON, the catalogue tree is opened automatically on the selected chart.

Selecting Charts via Information Table on Statistics/Selection Page

On “Statistics/Selection” page, position the cursor on the necessary row of the information table and press the right mouse/trackball button.

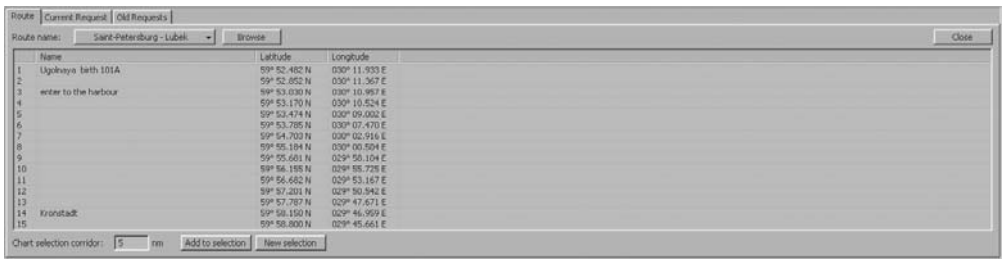


Choose “Select” row from the context menu. The necessary charts will be selected. To cancel the selection of these charts, choose “Deselect” row.

Compiling List of Charts along the Route

On “Statistics/Selection” page, press Add by route button.

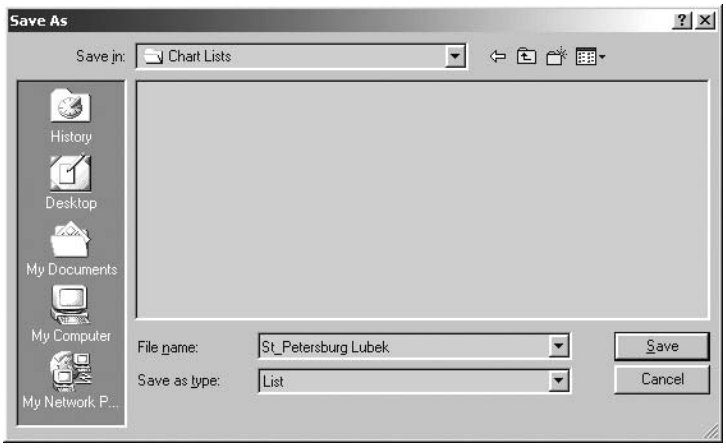
On “Route” page, which will open up, press Route name button. From the pull-down list, select a route stored in the ECDIS task. If the route is stored in another place, specify its path by using the “Browse” button. The selected route will be loaded on “Route” page and will be displayed in the Chart Display Area.



Use Chart selection corridor dialogue box to set the width of the corridor along the route for the chart selection (5 miles are set by default). To add charts along the route to those already selected, press Add to selection button, to form a list containing charts only along the route, press New selection button. Outlines of charts are shown in the red coloured dashed line.

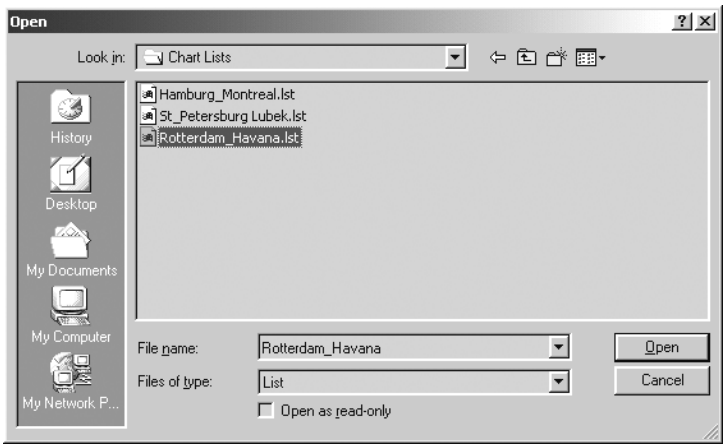
Saving and Loading Chart Lists

Select charts. Press Save List button. Specify the path to the folder with chart lists.

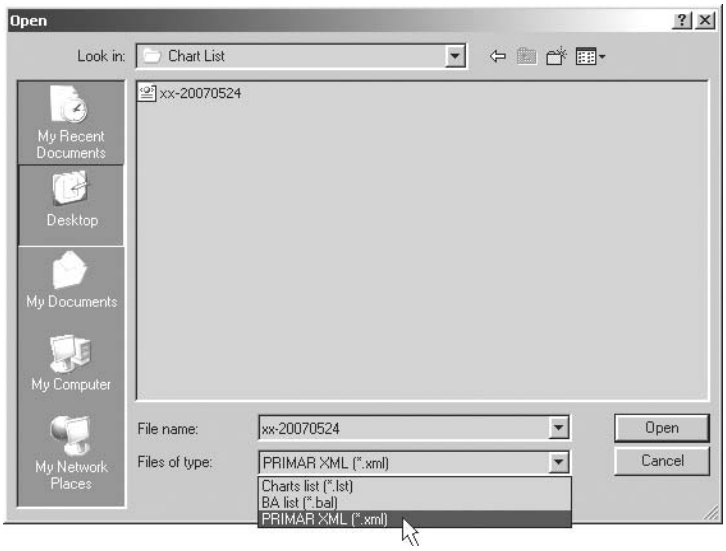


Press “Save” button.

To load saved chart lists, press “Load list” button. Specify the path to the folder with chart lists.



To load a list from the file created by using the Primar Chart Catalogue, select `PRIMAR XML (*.xml)` from the “Files of type” line.



Press “Open” button. The chart list will be loaded, and charts from the list will be automatically selected.

Using Filter for Obtaining Information and Selecting Charts

On “Statistics/Selection” page, check the following checkboxes in Filter settings group:

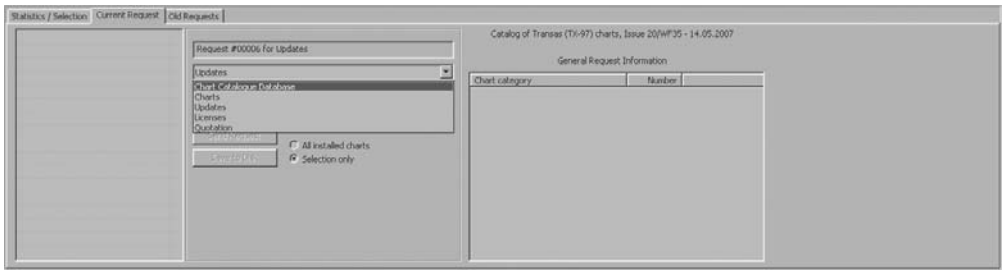
- For TX-97 format charts:
  - Show all – to display all the charts from the selected catalogue folder;
  - Ships collection – to display charts from the ship collection;
  - Selected – to display selected charts;
  - Min scale – to display charts on the scale smaller than the set value;
  - Max scale – to display charts on the scale larger than the set value.
- For ENC/SENC format charts:
  - Show all – to display all the charts from the catalogue;
  - Ships collection – to display charts from the ship collection;
  - Selected – to display selected charts;
  - Show coverage area – to display areas covered with SENC chart data;
  - Usage (Nav. Purpose) – to display charts with the certain navigational purpose.

  In addition to the settings already made, if it is necessary to choose charts according to the dates, check the following checkboxes in Date filter group:
  - All (actual collection) – to display all the charts of the collection;
  - First issue after – to display charts included in the chart catalogue after the specified date;
  - New issue after – to display charts updated, or whose new editions have been issued after the specified date;
  - Withdrawn after – to display the charts removed from the collection after the specified date.

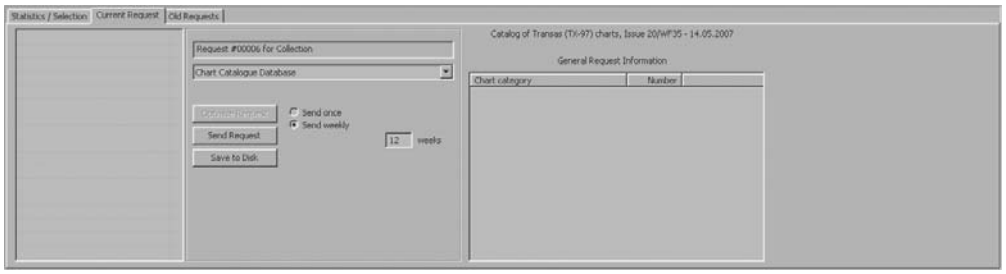
Ordering Data

Forming and Sending Catalogue Order

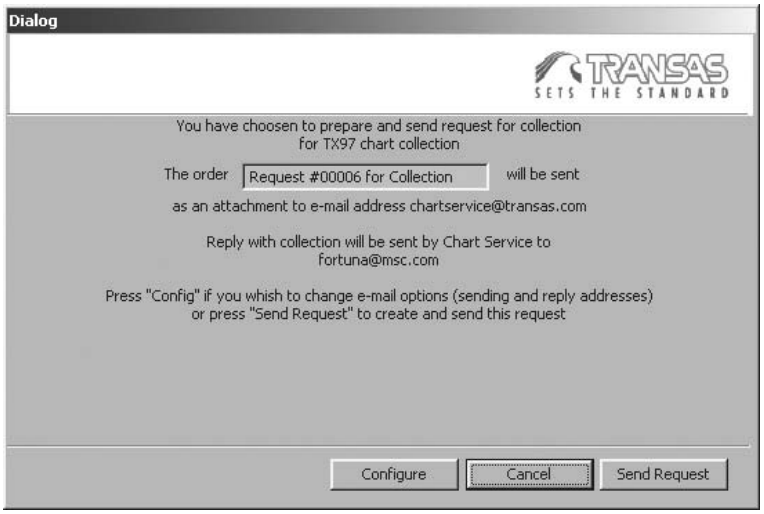
Use the appropriate tab in the bottom part of “Catalogue” panel to switch to “Current Request” page, from the pull-down list select “Chart Catalogue Data base” line (or press Catalogue button on “Statistics/Selection” page).



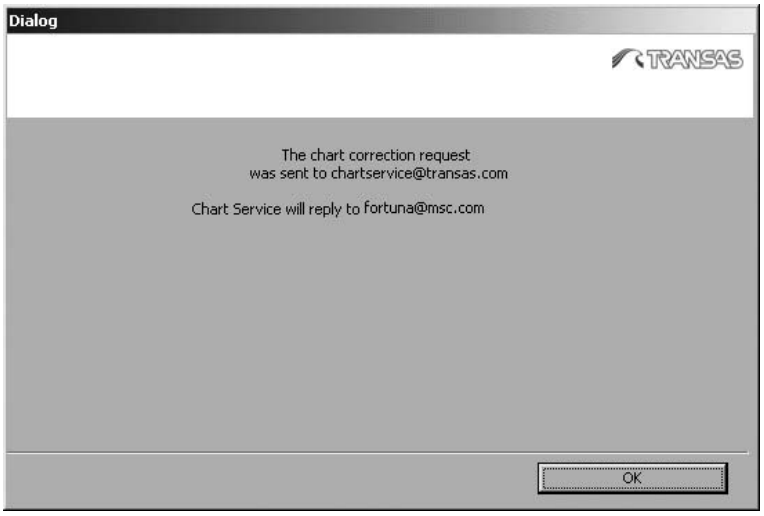
Send once checkbox is checked by default. If it is necessary to organise weekly catalogue delivery, check Send weekly checkbox. Specify the number of weeks during which the catalogue should be delivered.



To send an order, press Send Request button.


Dialog
TRANSAS
SETS THE STANDARD
You have choosen to prepare and send request for collection
for TX97 chart collection
The order
Request #00006 for Collection
will be sent
as an attachment to e-mail address chartservice@transas.com
Reply with collection will be sent by Chart Service to
fortuna@msc.com
Press "Config" if you whish to change e-mail options (sending and reply addresses)
or press "Send Request" to create and send this request
Configure
Cancel
Send Request

Press Send Request button. The order will be formed.

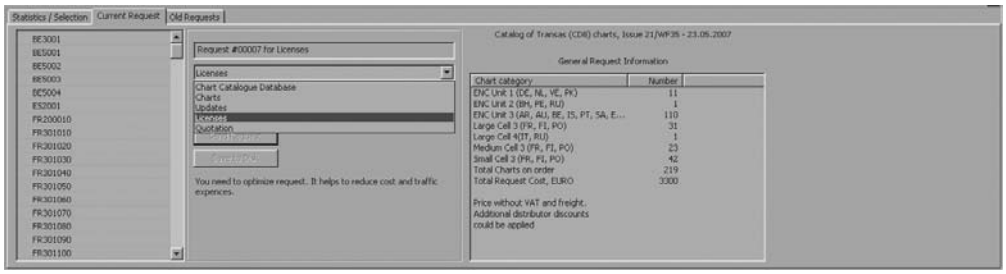


Press “OK” button.

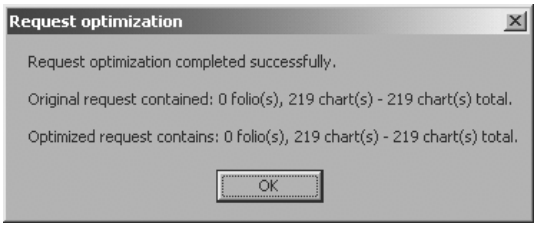
Forming and Sending License Order

Select charts, which licenses should be ordered for (see paragraph Compiling List of Charts and Chart Folios for Order).

Use the appropriate tab in the bottom part of “Catalogue” panel to switch to “Current Request” page, from the pull-down list select “Licenses” line (or press New Licenses button on “Statistics/Selection” page).

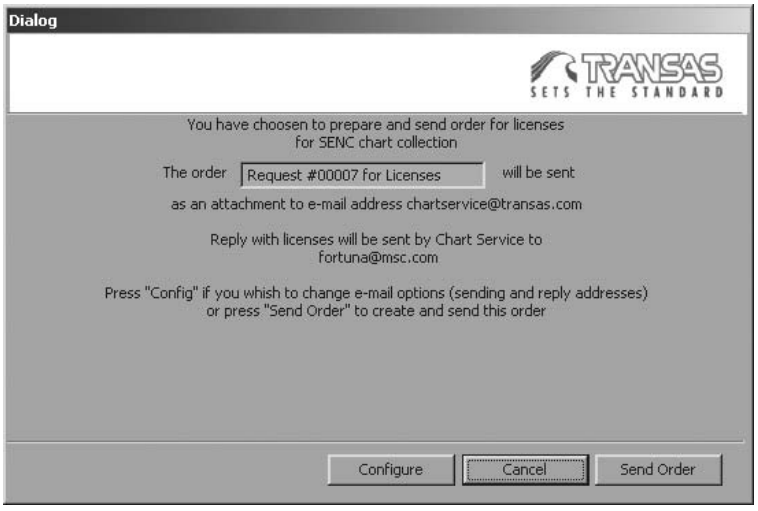

Statistics / Selection
Current Request
Old Requests
Request #00007 for Licenses
Licenses
Chart Catalogue Database
Charts
Updates
Licenses
Quotation
You need to optimize request. It helps to reduce cost and traffic expences.
Chart category
Number
ENC Unit 1 (DE, NL, VE, PK) 11
ENC Unit 2 (BH, PE, RU) 1
ENC Unit 3 (AR, AU, BE, IS, PT, SA, E... 110
Large Cell 3 (FR, FI, PO) 31
Large Cell 4(IT, RU) 1
Medium Cell 3 (FR, FI, PO) 23
Small Cell 3 (FR, FI, PO) 42
Total Charts on order 219
Total Request Cost, EURO 3300
Price without VAT and freight.
Additional distributor discounts could be applied

Press Optimize request button. The program will optimise the order by deleting charts which licenses are already available for, and will display a message with optimisation results.


Request optimization
Request optimization completed successfully.
Original request contained: 0 folio(s), 219 chart(s) - 219 chart(s) total.
Optimized request contains: 0 folio(s), 219 chart(s) - 219 chart(s) total.
OK

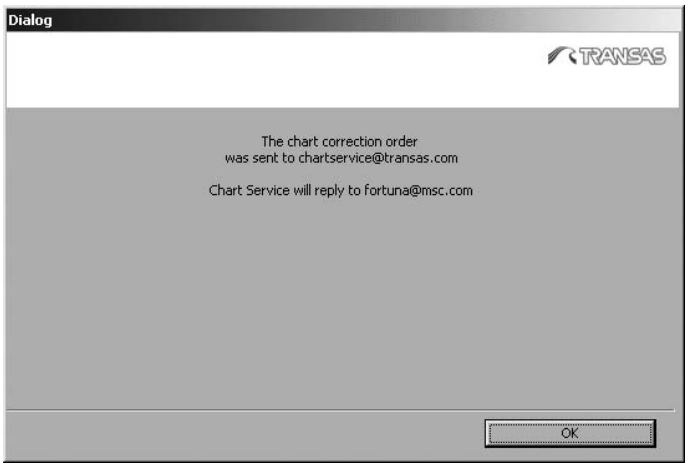
Press “OK” button.

Press Send Request button. The order will be formed.


Dialog
TRANSAS
SETS THE STANDARD
You have choosen to prepare and send order for licenses
for SENC chart collection
The order
Request #00007 for Licenses
will be sent
as an attachment to e-mail address chartservice@transas.com
Reply with licenses will be sent by Chart Service to
fortuna@msc.com
Press "Config" if you whish to change e-mail options (sending and reply addresses)
or press "Send Order" to create and send this order
Configure
Cancel
Send Order

To send the order immediately, press Send Order button.

With the correct mail program setup the order will be sent.



Press “OK” button.

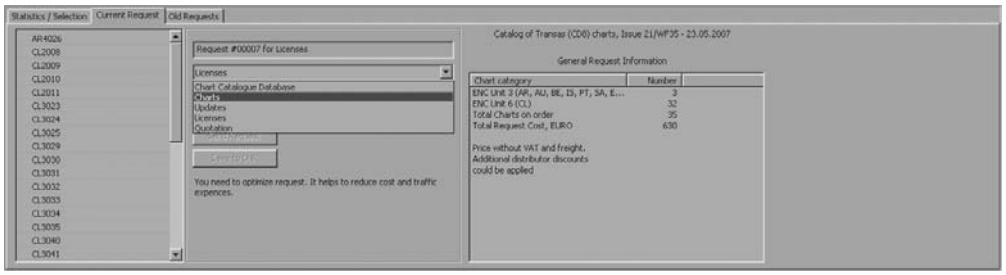
Forming and Sending Chart Order

Select charts, which should be ordered (see paragraph Compiling List of Charts and Chart Folios for Order).

ATTENTION!

When selecting charts, it is necessary to use a more recent catalogue than that available on the CD which charts were installed from.

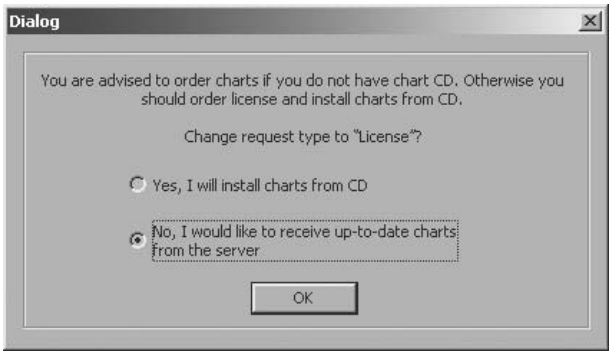
Use the appropriate tab in the bottom part of “Catalogue” panel to switch to “Current Request” page, from the pull-down list select “Charts” line (or press New Charts button on “Statistics/Selection” page).



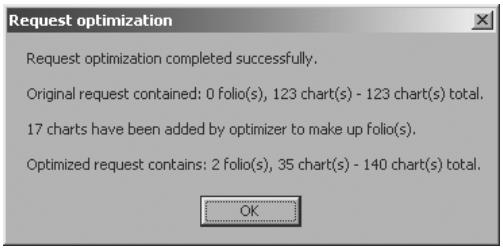
WARNING!

To cut expenses, it is worthwhile to order chart permits only, provided the charts themselves are available on the WF CD (see the previous item).

If you press New Charts button on “Statistics/Selection” page, select No, I would like to receive up-to-date charts from the server in the “Dialog” window and press the “OK” button.

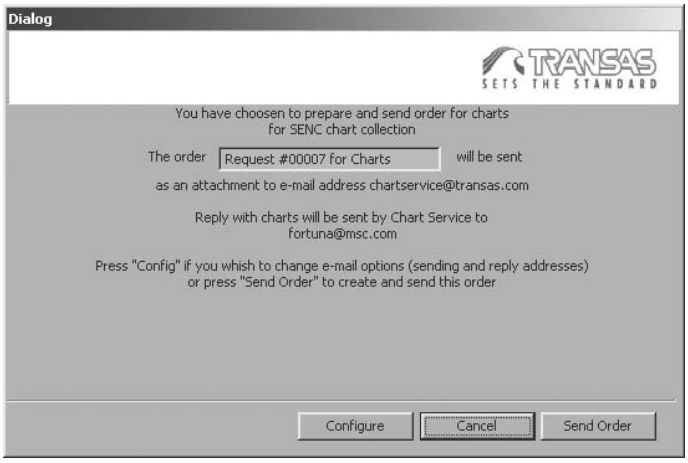

Dialog
You are advised to order charts if you do not have chart CD. Otherwise you should order license and install charts from CD.
Change request type to "License"?
Yes, I will install charts from CD
No, I would like to receive up-to-date charts from the server
OK

Press Optimize request button. The program will optimise the order by deleting charts already available and will display a message with optimisation results.


Request optimization
Request optimization completed successfully.
Original request contained: 0 folio(s), 123 chart(s) - 123 chart(s) total.
17 charts have been added by optimizer to make up folio(s).
Optimized request contains: 2 folio(s), 35 chart(s) - 140 chart(s) total.
OK

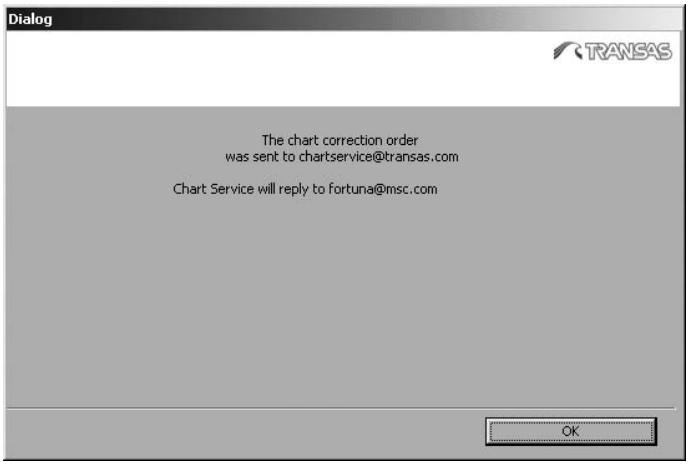
Press “OK” button.

Press Send Request button. The order will be formed.


Dialog
TRANSAS
SETS THE STANDARD
You have choosen to prepare and send order for charts for SENC chart collection
The order Request #00007 for Charts will be sent
as an attachment to e-mail address chartservice@transas.com
Reply with charts will be sent by Chart Service to fortuna@msc.com
Press "Config" if you whish to change e-mail options (sending and reply addresses) or press "Send Order" to create and send this order
Configure
Cancel
Send Order

To send the order immediately, press Send Order button.

With the correct mail program setup the order will be sent.

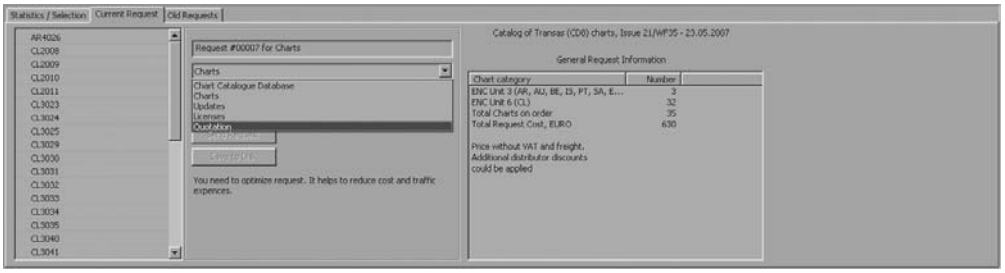


Press “OK” button.

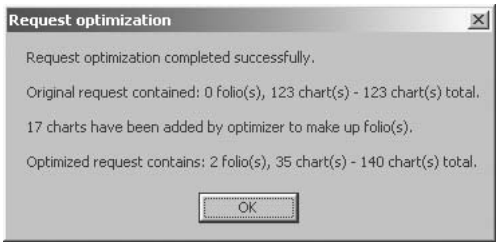
Forming and Sending Quotation Order

Select charts, which should be ordered (see paragraph Compiling List of Charts and Chart Folios for Order).

Use the appropriate tab in the bottom part of “Catalogue” panel to switch to “Current Request” page, from the pull-down list select “Quotation” line (or press Quotation button on “Statistics/Selection” page).

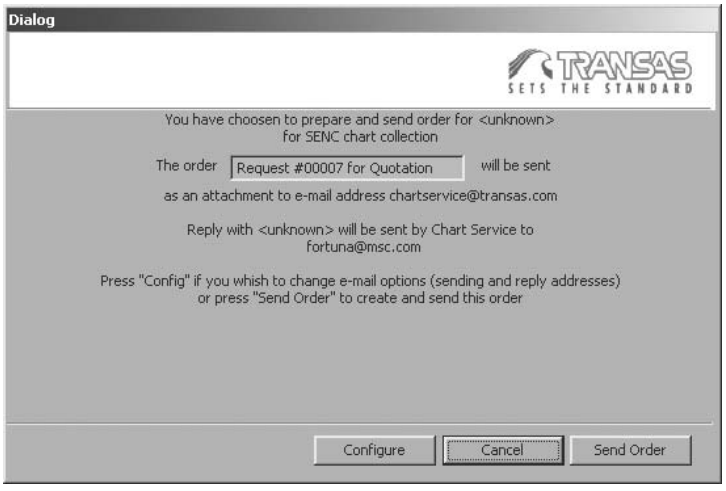


On “current Request” page press Optimize request button. The program will optimise the order by deleting charts already available, and will display a message with optimisation results.

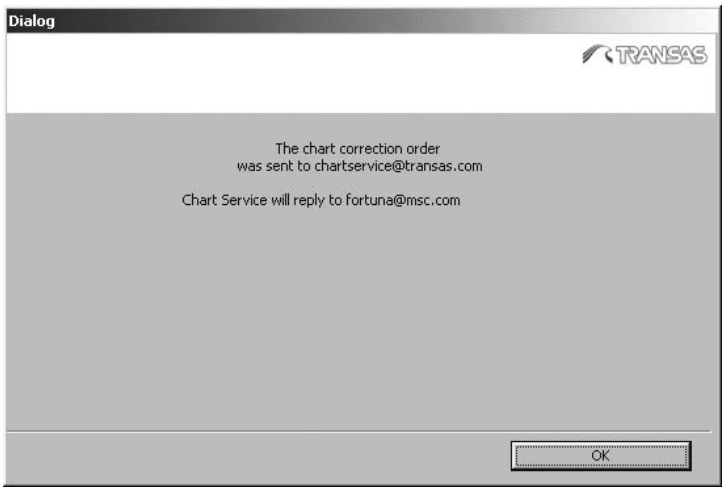

Request optimization
Request optimization completed successfully.
Original request contained: 0 folio(s), 123 chart(s) - 123 chart(s) total.
17 charts have been added by optimizer to make up folio(s).
Optimized request contains: 2 folio(s), 35 chart(s) - 140 chart(s) total.
OK

Press “OK” button.

Press Send Request button. The order will be formed.


Dialog
TRANSAS
SETS THE STANDARD
You have choosen to prepare and send order for <unknown>
for SENC chart collection
The order
Request #00007 for Quotation
will be sent
as an attachment to e-mail address chartservice@transas.com
Reply with <unknown> will be sent by Chart Service to
fortuna@msc.com
Press "Config" if you whish to change e-mail options (sending and reply addresses)
or press "Send Order" to create and send this order
Configure
Cancel
Send Order

To send the order immediately, press Send Order button.



Press “OK” button.

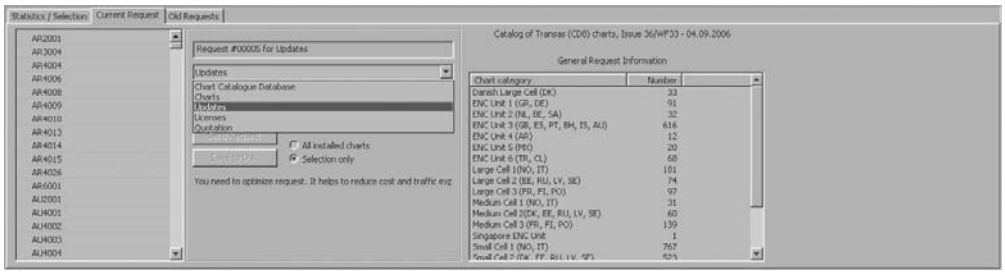
Forming and Sending Updating Order

Select charts, which should be updated (see paragraph Compiling List of Charts and Chart Folios for Order).

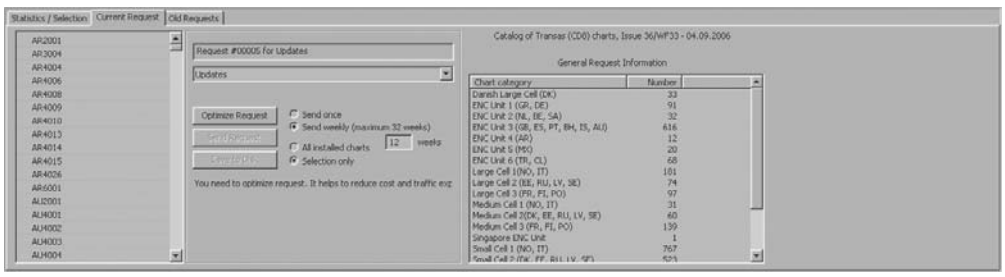
ATTENTION!

Updating cannot be ordered unless there is Professional Maintenance Service option in the license. When selecting chart, it is necessary to use a catalogue more recent than that available on the CD which charts were installed from.

Use the appropriate tab in the bottom part of “Catalogue” panel to switch to “Current Request” page, from the pull-down list select “Updates” line (or press Updates button on “Statistics/Selection” page).

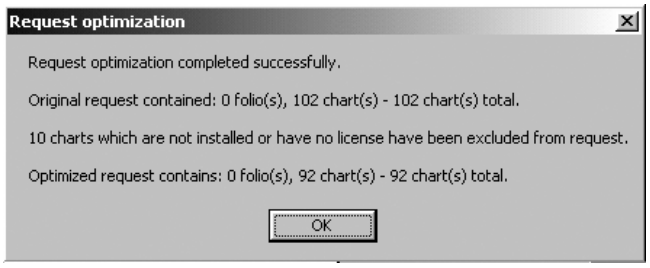


Send once checkbox is checked by default. If it is necessary to order weekly update subscription, check Send weekly checkbox. Specify the number of weeks during which the updating should be delivered (not more than the number of weeks until the end of the year).



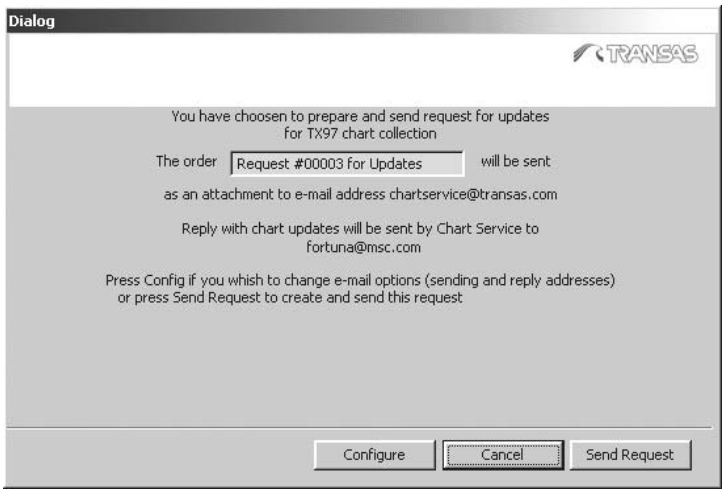
All installed charts check box is checked by default. If it is necessary to order updating subscription for selected charts only, check Selection only check box. In this case, the order requires optimization.

Press Optimize request button. The program will optimise the order by which available in the ship collection, and will output a message with optimisation results.


Request optimization
Request optimization completed successfully.
Original request contained: 0 folio(s), 102 chart(s) - 102 chart(s) total.
10 charts which are not installed or have no license have been excluded from request.
Optimized request contains: 0 folio(s), 92 chart(s) - 92 chart(s) total.
OK

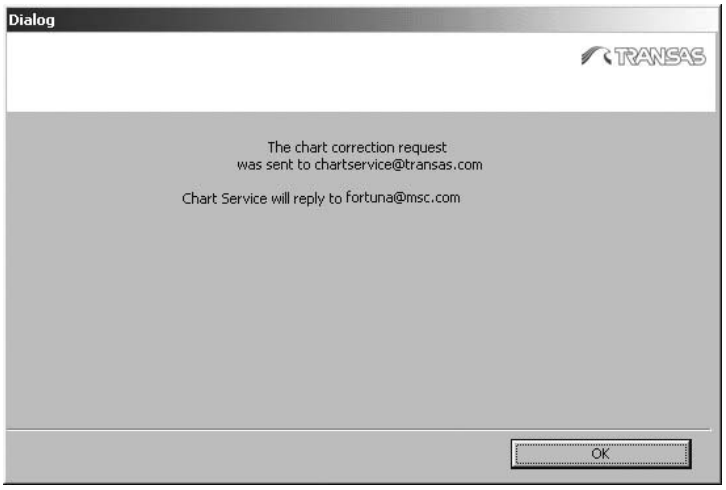
Press “OK” button.

Press Send Request button.


Dialog
TRANSAS
You have choosen to prepare and send request for updates
for TX97 chart collection
The order
Request #00003 for Updates
will be sent
as an attachment to e-mail address chartservice@transas.com
Reply with chart updates will be sent by Chart Service to
fortuna@msc.com
Press Config if you whish to change e-mail options (sending and reply addresses)
or press Send Request to create and send this request
Configure
Cancel
Send Request

To send the order immediately, press Send Request button.

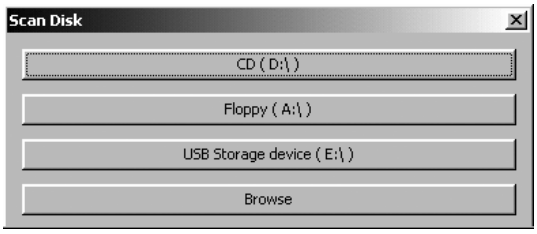
With the correct mail program setup the order will be sent.



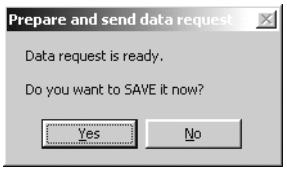
Press “OK” button.

Saving Order

Compile an order for a catalogue, licenses, charts or their updating (see paragraphs above). Instead of Send Request button, press Save to Disk button.



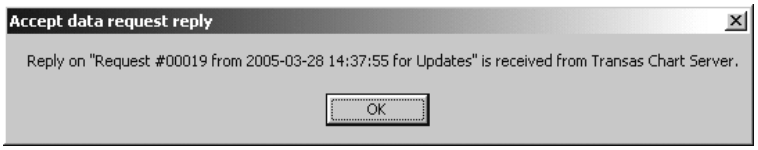
Specify the path to the carrier where the order should be saved. The order will be formed.



To save the order, press “Yes” button.

Receiving Orders

With MS Outlook and MS Outlook Express programs installed on the communication PC, orders are received automatically.


Accept data request reply
Reply on "Request #00019 from 2005-03-28 14:37:55 for Updates" is received from Transas Chart Server.
OK

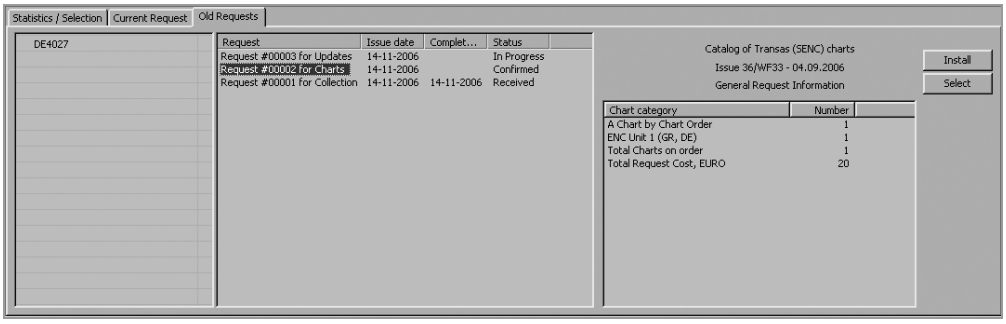
Press “OK” button.

Check checkboxes next to the names of operations, which should be performed, press “OK” button.

The program will perform the specified operations.

Viewing Old Orders

Use the appropriate tab in the bottom part of “Catalogue” panel to switch to “Old Requests” page. Position the cursor on the order which you wish to view and press the left mouse/trackball button.



The table to the left will display chart folios and charts included in the order.

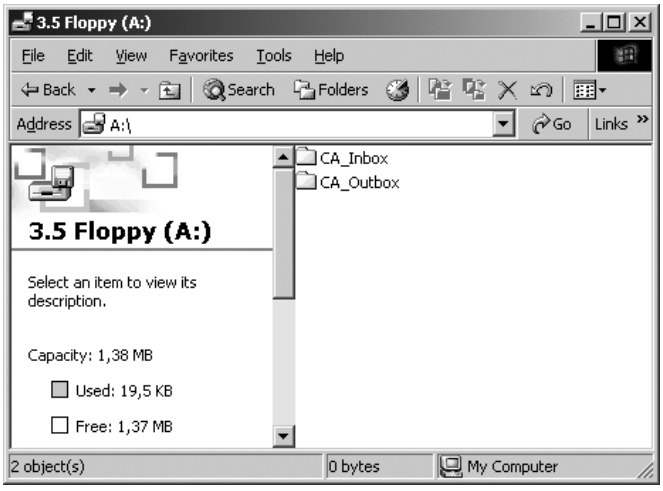
To select these chart folios and charts for a new order, press Select button.

To install the received data, press Install button (for orders with “Received” status only).

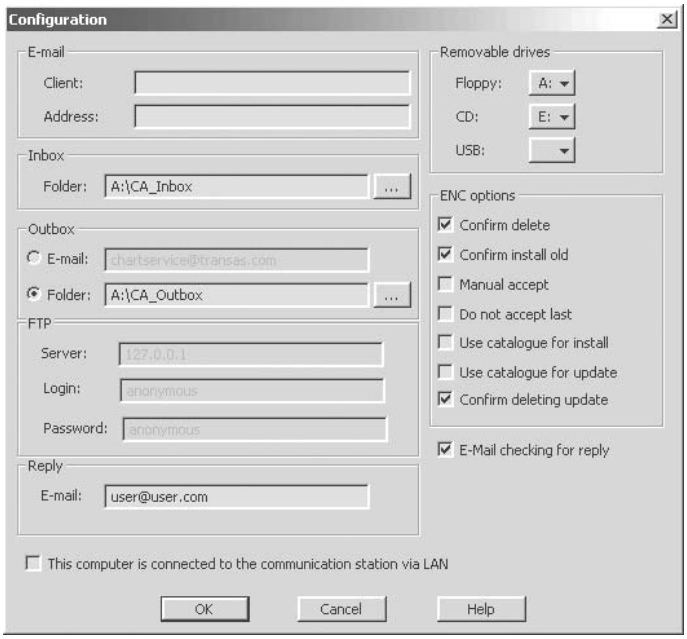
Ordering Data in Off-line Mode (Folder Mode)

When installing the CA, select “shared folder or e-mail directly” (see document TRANSAS INS (V. 1.11.002). INSTALLATION GUIDE, chapter System Settings, section Charts Installation and Chart Assistant Adjustment, paragraph Chart Assistant Adjustment).

On a diskette or the USB memory stick, create two folders: *CA_Inbox* and *CA_Outbox*.



Load the “Chart Assistant” and press the button in the Chart Display Area.



In the Chart Assistant utility “Configuration” window uncheck This computer is connected to the communication station via LAN checkbox if it is checked.

In the CA configuration window, fill in appropriate fields as follows (e.g., for a diskette):

- Inbox – *<Name of Disk>:\CA_Inbox*;
- Outbox – *<Name of Disk>:\CA_Outbox*;
- Reply – the ship’s e-mail address should be written here.

Create and send an order to make a subscription for chart corrections (see paragraph Ordering Data in On-line Mode). As the result, the order will be saved on the diskette or memory stick in the *CA_Outbox* folder.

Take off the diskette or memory stick and send a file from the *CA_Outbox* folder (this will be a file with `*.cdf` extension) as an attachment to chartservice@transas.com. No special subject or text is necessary. Then delete the `*.cdf` file from the memory stick to prevent mixing up with other orders (files which will be saved by CA in the future).

When you receive an e-mail from chartservice@transas.com, save attachment(s) (these will be `*.cdf` files) to memory stick in the *CA_Inbox* folder. Then insert the memory stick into the computer with the Chart Assistant utility. When the Chart Assistant detects new data in the memory stick, it offers to install updates. Press “OK” and apply chart corrections.

Work with CA Wizard

Start Chart Assistant, select “Start with CA Wizard” mode and select the necessary operation.

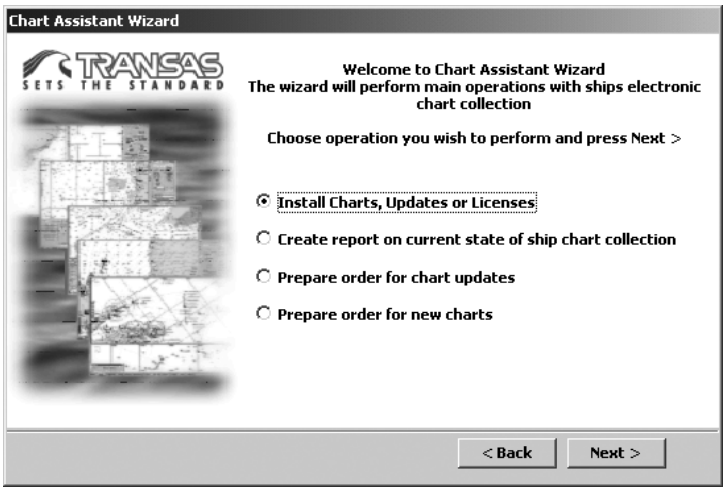
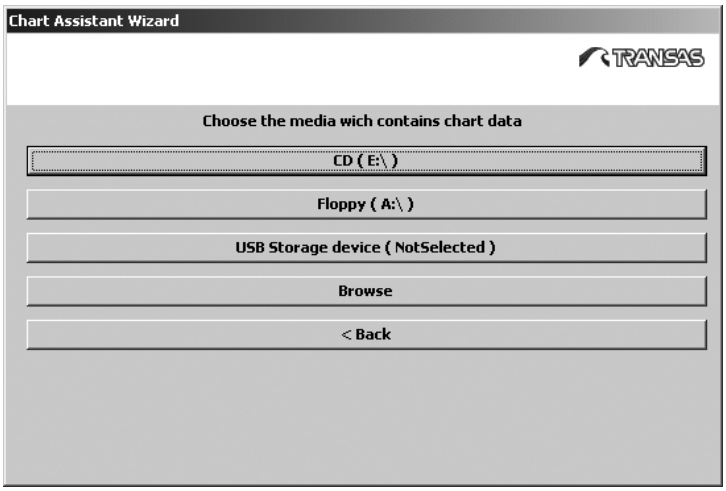


Chart Assistant Wizard
TRANSAS
SETS THE STANDARD
Welcome to Chart Assistant Wizard
The wizard will perform main operations with ships electronic chart collection
Choose operation you wish to perform and press Next >
Install Charts, Updates or Licenses
Create report on current state of ship chart collection
Prepare order for chart updates
Prepare order for new charts
< Back
Next >

Installation Charts, Updates and Licenses

Select “Install Charts, Updates and Licenses” operation and press “Next >” button.



Specify the path to external storage containing the chart data.

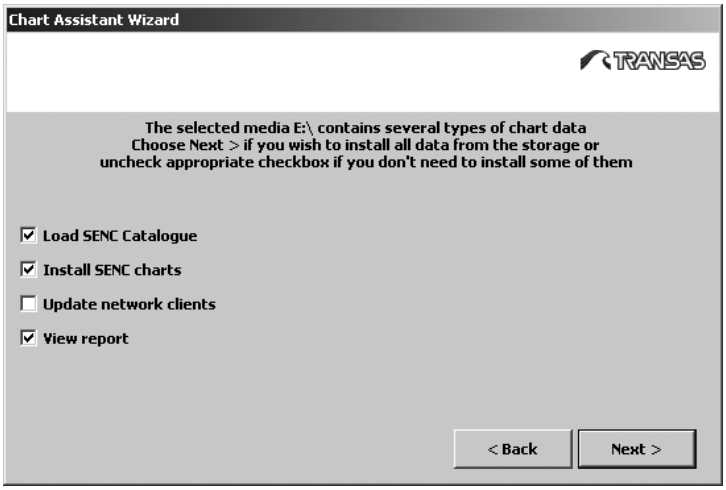


Chart Assistant Wizard
TRANSAS
The selected media E:\ contains several types of chart data
Choose Next > if you wish to install all data from the storage or
uncheck appropriate checkbox if you don't need to install some of them
Load SENC Catalogue
Install SENC charts
Update network clients
View report
< Back
Next >

Select the necessary operation by checked appropriated checkboxes and press “Next >” button.

General log is displayed.

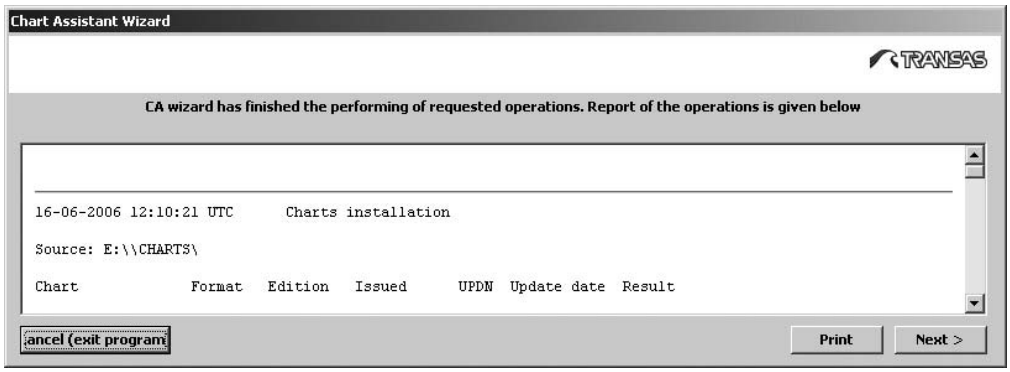


Chart Assistant Wizard
TRANSAS
CA wizard has finished the performing of requested operations. Report of the operations is given below
16-06-2006 12:10:21 UTC Charts installation
Source: E:\\CHARTS\
Chart Format Edition Issued UPDN Update date Result
ancel (exit program
Print
Next >

Press “Next >” button to return to start utility window.

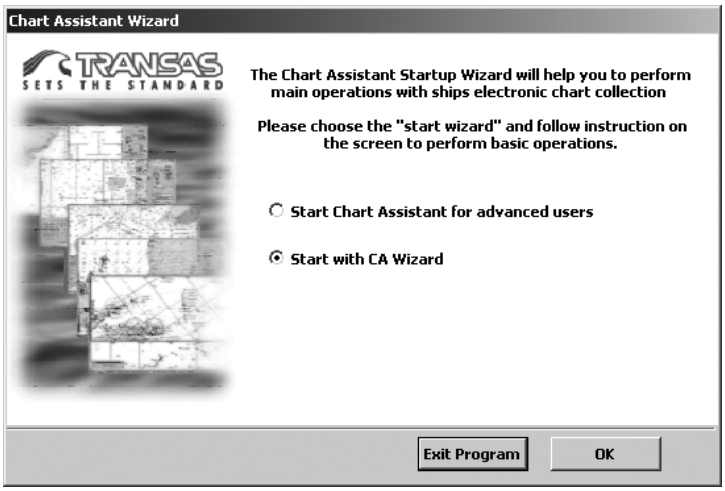


Chart Assistant Wizard
TRANSAS
SETS THE STANDARD
The Chart Assistant Startup Wizard will help you to perform main operations with ships electronic chart collection
Please choose the "start wizard" and follow instruction on the screen to perform basic operations.
Start Chart Assistant for advanced users
Start with CA Wizard
Exit Program
OK

Creation Report on Current State of Ship Chart Collection

Select “Create Report on Current State of Ship Chart Collection” operation and press “Next >” button.

Select type of report and press “Next >” button.

General log is displayed.

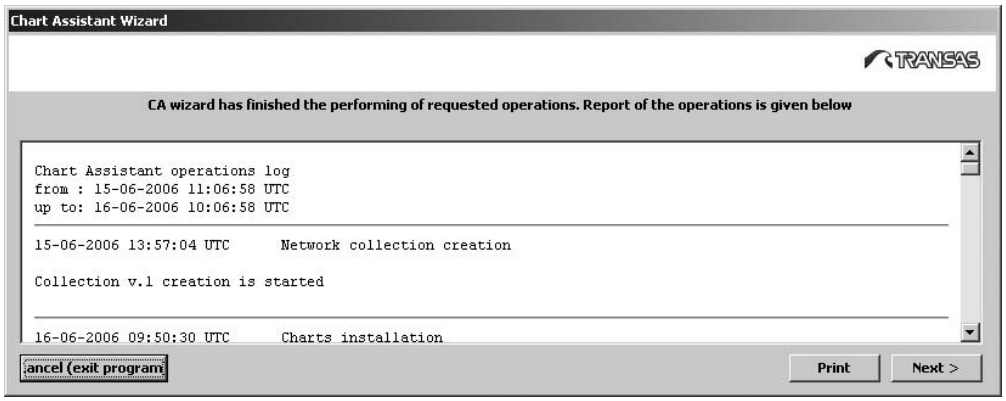


Chart Assistant Wizard
TRANSAS
CA wizard has finished the performing of requested operations. Report of the operations is given below
Chart Assistant operations log
from : 15-06-2006 11:06:58 UTC
up to: 16-06-2006 10:06:58 UTC
15-06-2006 13:57:04 UTC Network collection creation
Collection v.1 creation is started
16-06-2006 09:50:30 UTC Charts installation
ancel (exit program
Print
Next >

Press “Next >” button to return to start utility window.

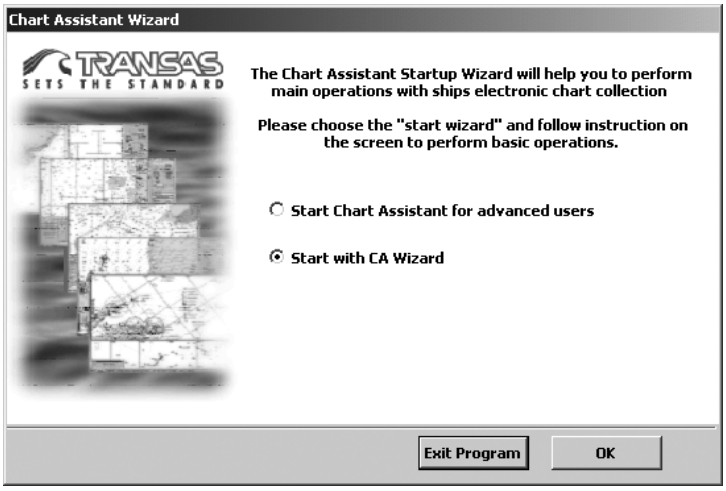


Chart Assistant Wizard
TRANSAS
SETS THE STANDARD
The Chart Assistant Startup Wizard will help you to perform main operations with ships electronic chart collection
Please choose the "start wizard" and follow instruction on the screen to perform basic operations.
Start Chart Assistant for advanced users
Start with CA Wizard
Exit Program
OK

Preparation Order for Chart Updates

Select “Prepare Order for Chart Updates” operation and press “Next >” button.

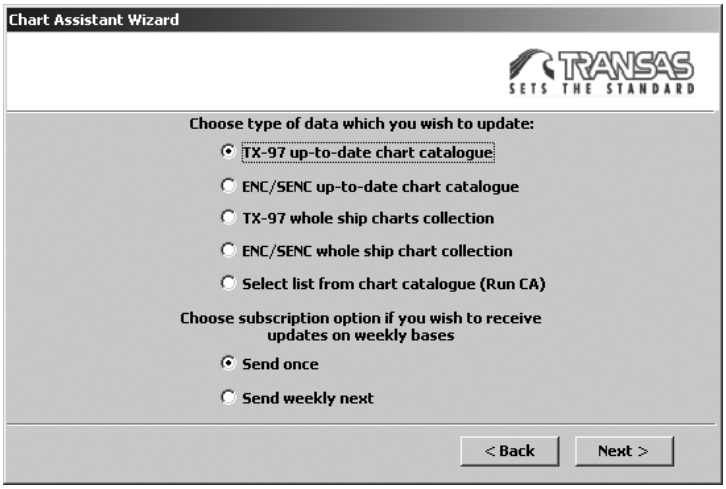


Chart Assistant Wizard
TRANSAS
SETS THE STANDARD
Choose type of data which you wish to update:
TX-97 up-to-date chart catalogue
ENC/SENC up-to-date chart catalogue
TX-97 whole ship charts collection
ENC/SENC whole ship chart collection
Select list from chart catalogue (Run CA)
Choose subscription option if you wish to receive updates on weekly bases
Send once
Send weekly next
< Back
Next >

Select type of data and subscription option. Press “Next >” button.

Note: If the “Select list from chart catalogue” item is selected, the Chart Assistant utility is run in the “Start Chart Assistant for Advanced Users” mode (see above under Ordering Data in On-line Mode).

Chart Assistant Wizard
TRANSAS
You have choosen to prepare and send request for collection
for SENC chart collection
The order
Request #00009 for Collection
will be sent
as an attachment to e-mail address chartservice@transas.com
Reply with chart updates will be sent by Chart Service to
fortuna@msco.com
Press Config if you whish to change e-mail options (sending and reply addresses)
or press Send Request to create and send this request
Configure
< Back
Send Request

Press Send Request button.

Press “OK” button to return to start utility window.

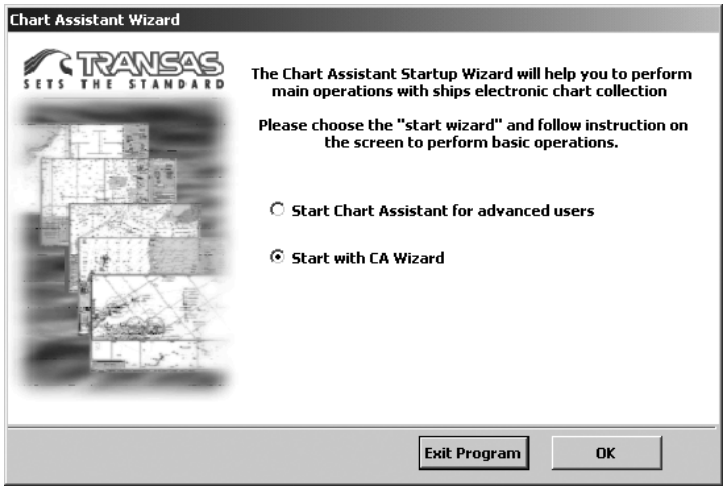


Chart Assistant Wizard
TRANSAS
SETS THE STANDARD
The Chart Assistant Startup Wizard will help you to perform
main operations with ships electronic chart collection
Please choose the "start wizard" and follow instruction on
the screen to perform basic operations.
Start Chart Assistant for advanced users
Start with CA Wizard
Exit Program
OK

Preparation Order for New Charts

Select “Prepare Order for New Charts” operation and press “Next >” button.

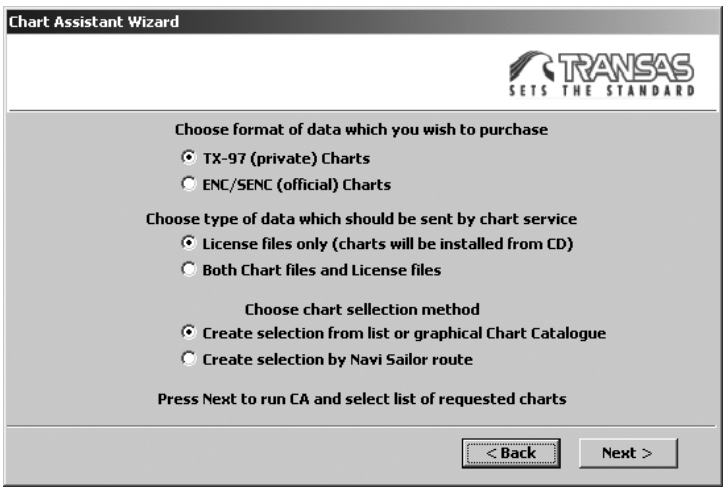


Chart Assistant Wizard
TRANSAS
SETS THE STANDARD
Choose format of data which you wish to purchase
TX-97 (private) Charts
ENC/SENC (official) Charts
Choose type of data which should be sent by chart service
License files only (charts will be installed from CD)
Both Chart files and License files
Choose chart sellection method
Create selection from list or graphical Chart Catalogue
Create selection by Navi Sailor route
Press Next to run CA and select list of requested charts
< Back
Next >

Select chart format, type of data and chart selection method. Press “Next >” button.

After the Chart Assistant utility start in the “Start Chart Assistant for Advanced Users” mode, a window with further directions will open up.

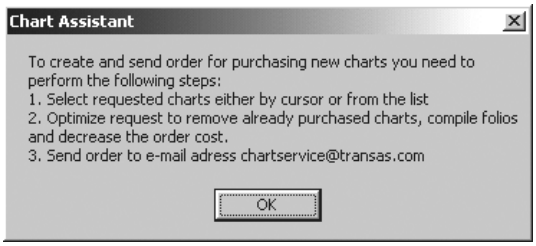


Chart Assistant
To create and send order for purchasing new charts you need to perform the following steps:
1. Select requested charts either by cursor or from the list
2. Optimize request to remove already purchased charts, compile folios and decrease the order cost.
3. Send order to e-mail adress chartservice@transas.com
OK

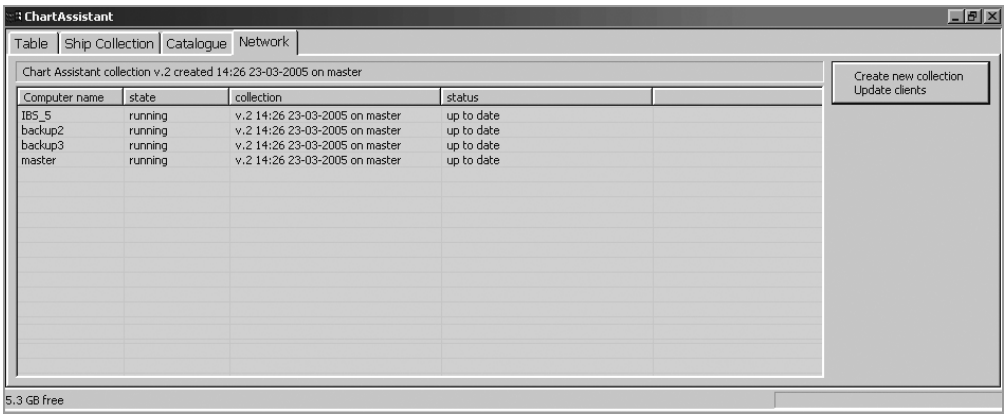
Press “OK” button and see above paragraph Ordering Data in On-line Mode.

Synchronization of Chart Collection

ATTENTION!

After any operation on the chart collection on one of WSs, collection equalising should be performed for all the WSs.

By using the tab in the left top corner, switch to “Network” panel.


ChartAssistant
Table
Ship Collection
Catalogue
Network
Chart Assistant collection v.2 created 14:26 23-03-2005 on master
Create new collection
Update clients
Computer name
state
collection
status
IBS_5 running v.2 14:26 23-03-2005 on master up to date
backup2 running v.2 14:26 23-03-2005 on master up to date
backup3 running v.2 14:26 23-03-2005 on master up to date
master running v.2 14:26 23-03-2005 on master up to date
5.3 GB free

To synchronize the collection at all the workstations, press the Create new collection. Update clients button.

Saving and Printing Out Information Files

The Chart Assistant utility has a capability to save on an external carrier and print out files containing information on the utility operation (various logs, information on charts and catalogues, status reports, etc). Such files have Export and Print buttons in the top right corner.

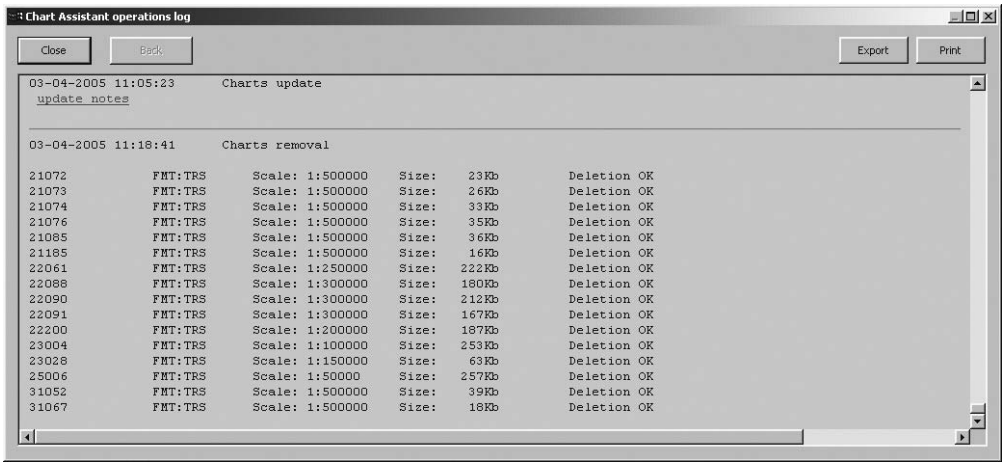
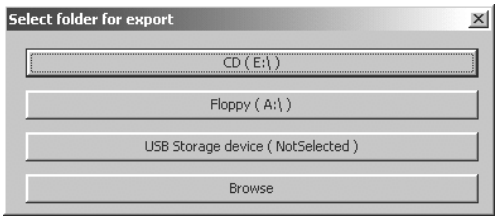


Chart Assistant operations log
Close
Back
Export
Print
03-04-2005 11:05:23 Charts update
update_notes
03-04-2005 11:18:41 Charts removal
21072 FMT:TRS Scale: 1:500000 Size: 23Kb Deletion OK
21073 FMT:TRS Scale: 1:500000 Size: 26Kb Deletion OK
21074 FMT:TRS Scale: 1:500000 Size: 33Kb Deletion OK
21076 FMT:TRS Scale: 1:500000 Size: 35Kb Deletion OK
21085 FMT:TRS Scale: 1:500000 Size: 36Kb Deletion OK
21185 FMT:TRS Scale: 1:500000 Size: 16Kb Deletion OK
22061 FMT:TRS Scale: 1:250000 Size: 222Kb Deletion OK
22088 FMT:TRS Scale: 1:300000 Size: 180Kb Deletion OK
22090 FMT:TRS Scale: 1:300000 Size: 212Kb Deletion OK
22091 FMT:TRS Scale: 1:300000 Size: 167Kb Deletion OK
22200 FMT:TRS Scale: 1:200000 Size: 187Kb Deletion OK
23004 FMT:TRS Scale: 1:100000 Size: 253Kb Deletion OK
23028 FMT:TRS Scale: 1:150000 Size: 63Kb Deletion OK
25006 FMT:TRS Scale: 1:50000 Size: 257Kb Deletion OK
31052 FMT:TRS Scale: 1:500000 Size: 39Kb Deletion OK
31067 FMT:TRS Scale: 1:500000 Size: 18Kb Deletion OK

Press Export button.



Specify the path to the carrier where the file should be saved. The file will be saved as `ChartAssistant.html` (as `ChartAssistant_001.html` when the next file is saved, and so on.

To print out the file press Print button.

CHAPTER 2

Description of Data Tool Utility

This chapter provides a description of the utility, which allows the INS archives to be handled.

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SOFTWARE DESCRIPTION

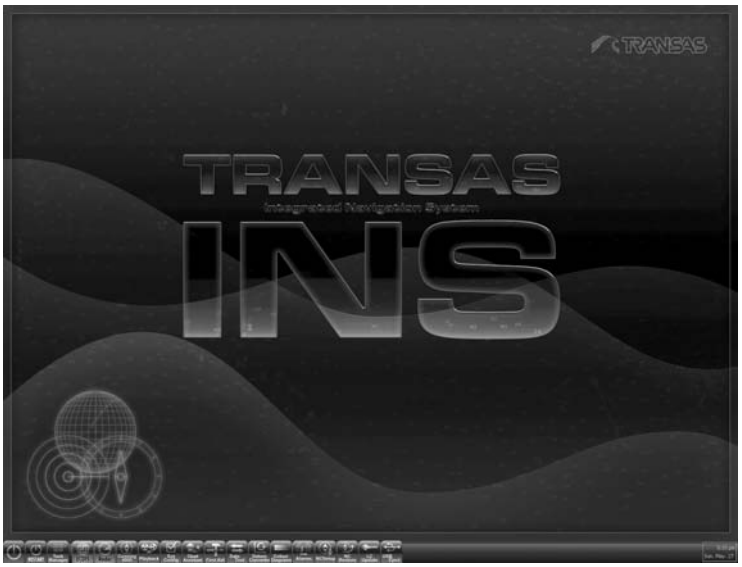
Purpose

Data Tool utility is designed for work with the INS system archive data files and allows the following operations to be performed:

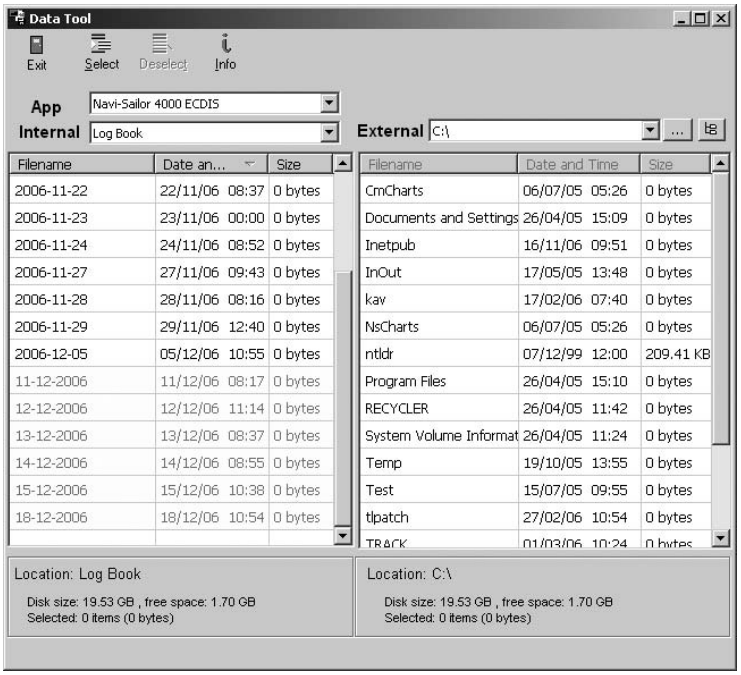
- to copy the INS data onto an external carrier and the other way round;
- to move the INS data onto an external carrier and the other way round;
- to delete data from the INS program;
- to view and print out archive data.

Data Tool Utility Window

Press button for run Data Tool utility.



After the utility is run the screen displays a control window:



Data Tool utility window consists of the following parts:

- Toolbar;
- Application selection window;
- Internal group;
- External group;
- Internal and External panels area;
- Information panel area.

Toolbar

- To exit from the utility;

- To copy selected files;

- To move selected files;

- To delete selected files;

- To select a group of files by entering any number of characters from their names (including extension) in “Select Items” window;

- To deselect a group of files;

- To view the contents of selected files;

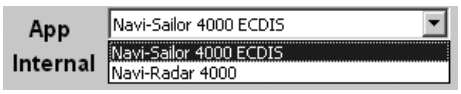
- To convert the selected file from binary to text format (files with `*.cvt`, `*.txt` extension);

- To call a window with information on the software product.

Application Selection Window

Files of the ECDIS task and RADAR task are stored separately, and are selected with the App drop-dawn list:

- ECDIS task – Navi-Sailor 4000 ECDIS;
- RADAR task – Navi-Radar 4000.



Internal Group

Internal group represents a list of archive files stored in the INS.

The list of files for ECDIS task consists of the following file groups:

Name	File location in the product directory (C:\TRANSAS)	File contents
Log Book	\TRACK\DD-MM-YYYY*.LBK	Electronic ship logbooks
Track	\TRACK\DD-MM-YYYY\InsTargets.trk, InsTrack.tgt	Ownship and targets tracks
Add Info	\IBS\Sailor\ADD_INFO*.ai, *.mcr	Created and saved user files
Add Info import from NS2500	\IBS\Collections\ADD_INFO\NN\Data *.cvt, *.cra, *.ai, *.mcr where NN – collection number	Created saved and converted to text format user files (including user files from NS 2500)[5]
Text to Add Info	\IBS\Collections\ADD_INFO\NN\Data *.cvt where NN – collection number	Converted to text format user files
Add Info to text	\IBS\Collections\ADD_INFO\NN\Data *.cvt. where NN – collection number	Created and saved user files
Attachments (text)	\\IBS\Collections\ADD_INFO\NN\Data *.txt, *.rtf, *.doc. where NN – collection number	Text files attached to the user chart objects (Add Info)
Attachments (picture)	\IBS\Collections\ADD_INFO\NN\Data *.bmp, *.pdf, *.gif, *.jpg, *.tif	Graphic files attached to the user chart objects (Add Info)
Route	\IBS\Collections\ROUTE\NN\Data *.rt3 where NN – collection number	Routes created and saved
Route convert from NS2500	\IBS\Collections\ROUTE\NN\Data *.rte where NN – collection number	Route files created in NS 2400/2500 systems
Route to text	\IBS\Collections\ROUTE\NN\Data *.rt3, *.cvt where NN – collection number	Created, saved and converted to text format routes
Text to route	\IBS\Collections\ROUTE\NN\Data *.rt3, *.cvt where NN – collection number	Created, saved and converted to text format routes
Route in Excel format	\IBS\ Sailor\ROUTE *.xls	Tabular form of routes as MS Excel files
Picture	IBS\Sailor\BMP *.bmp	Graphic files created when the screen graphic copies are made (<Ctrl>+<P>)
Old Log Book	_TRACK\DD-MM-YYYY*.LBK	Previously created electronic ship log book files placed into _TRACK subdirectory after the reconstruction of the standard (initial) INS system configuration (Restore utility)
Old Track	_TRACK\DD-MM-YYYY\InsTargets.tgt, InsTrack.trk	Previously created ownship and target track recording files placed into _TRACK subdirectory after the reconstruction of the standard (initial) INS system configuration (Restore utility)

[5] – there is no conversion of files with user chart objects in this version.

Name	File location in the product directory (C:\TRANSAS)	File contents
Radar.RPR	\TRACK\radar.rpr	Files with recording of the radar picture
Old Radar.RPR	_TRACK\radar.rpr	Previously created files with recording radar picture placed into _TRACK subdirectory after the reconstruction of the standard (initial) INS system configuration (Restore utility)
SPOS	\IBS\Sailor\SPOS *.sps, *.txt	SPOS weather and subscription files
COMTrace	IBS\ComTrace.FA\comtrace.__	Created COMTrace file

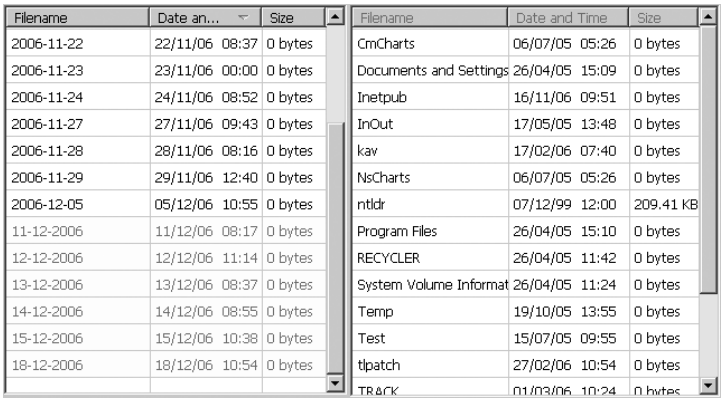
The list of files for RADAR task consists of the following file groups:

Name	File location in the product directory (C:\TRANSAS)	File contents
Picture	IBS\Radar\BMP *.bmp	Graphic files created when the screen graphic copies are made (<Ctrl>+<P>)

External Group

External group allows selection of folders on the external carrier where archive data files are stored.

Internal and External Panels Area



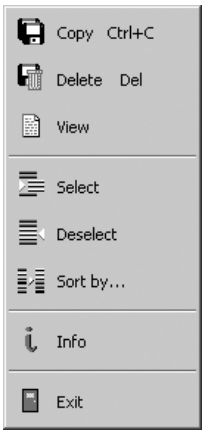
Internal and External panels area contains lists of and information on files on the internal (INS directory) and external carriers in the following form:

- File name – file name;
- Data and Time – date/time when the file was created or last modified (by the computer time);
- Size – file size in bytes.

On Internal panel, lines in files of Log Book and Track groups can be highlighted in the following colours:

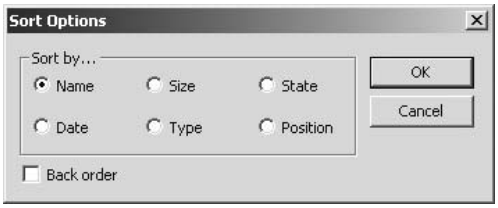
- yellow – files not more than 7 days old (moving and deleting operations on files are prohibited);
- blue – selected files;
- white – all the rest.

In addition, functional context menu is provided by pressing the right trackball/mouse button.



The menu operating principle is similar to the functional buttons with a new function added: Sort by... which calls “Sort Options” window for selecting the file arrangement type.

Sort Options Window



“Sort Options” window consists of the following parts:

- Sort by... group contains checkboxes for the selection of file sorting by the following types (in the alphabetic or ascending value order):
  - Name – by the file name;
  - Date – by the file creation date;
  - Size – by the file size in bytes;
  - Type – by the file type;
  - State – to set the selected files in the first lines in the alphabetic order;
  - Position – to arrange files according to their arrangement on the disk.
- Back order – group – to set the file arrangement reverse to that selected in Sort by... group;
- Toolbar:
  - “OK” – to confirm the settings and start the sorting process;
  - “Cancel” – to cancel the settings and close the window.

Information Panels Area

Location: Log Book
Disk size: 19.53 GB , free space: 1.89 GB
Selected: 1 items (14.09 KB)
Location: A:\
Disk size: 1 MB , free space: 0 MB
Selected: 0 items (0 bytes)

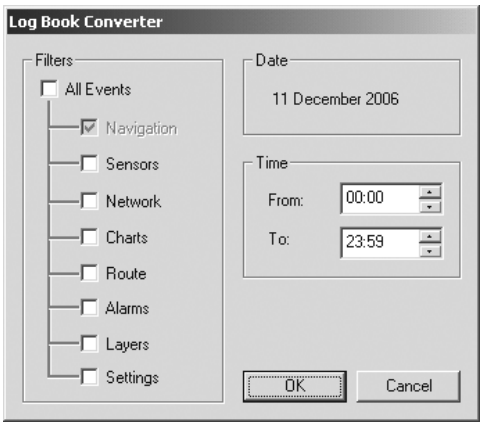
Information Panels area contains the following information:

- total and free space on the carrier;
- number of selected files and their size.

The bottom status bar specifies the access path to the selected file or a group of files.

File Converting Windows

Log Book Converter Window



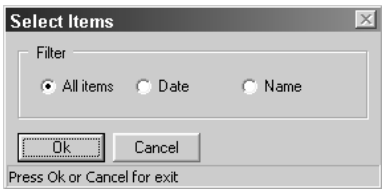
"Log Book Converter" window is designed for converting the electronic ship log books, and is divided arbitrarily into four groups:

- Filters group permits conversion of the required event groups stored in the electronic ship log book file (see document TRANSAS INS (V. 1.11.002). ECDIS, chapter Operating Principles);
- Date group displays the file creation date (event recording date);
- Time group is designed for setting the time interval within which the data from the electronic ship log book will be converted (UTC time);
- Toolbar:
  - "OK" – to confirm the settings and start the conversion process;
  - "Cancel" – to cancel the settings and close the window.

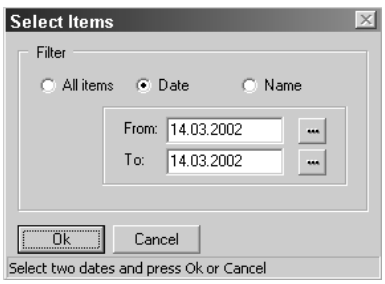
Select Items and Deselect Items Windows

File selection windows have identical contents, which change depending on the selection parameters setting in Filter field. They can acquire three forms depending on the way the checkboxes are checked:

- All Items – setting for the selection of all the files;



- Date – setting for the selection of files in the interval between the dates specified in From and To lines;



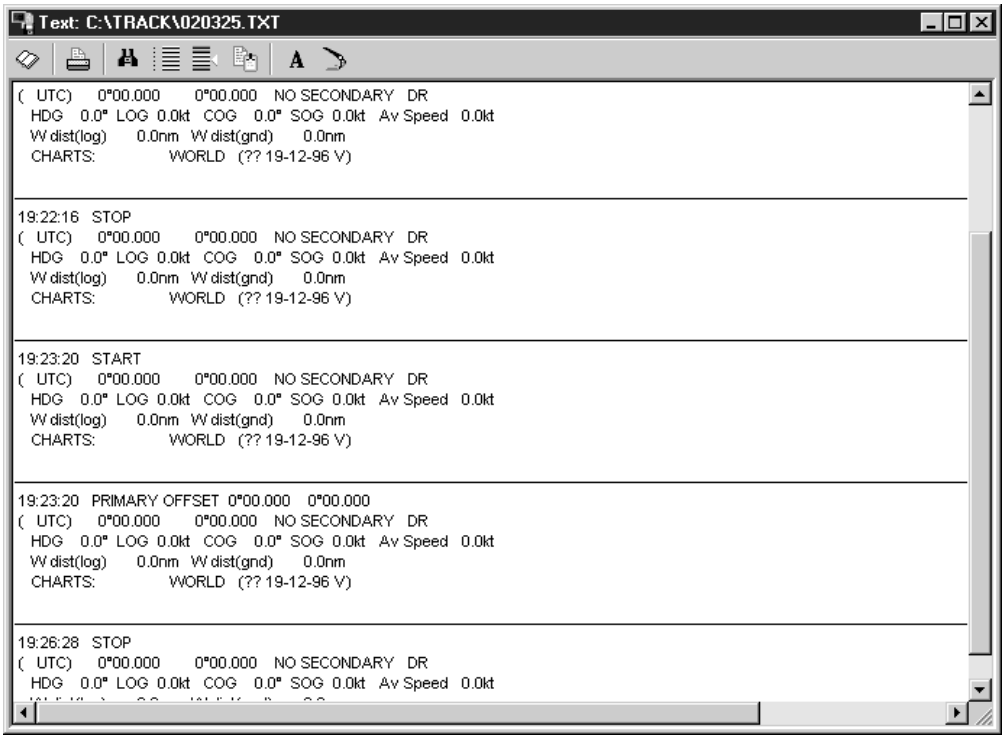
When the button to the right of the date input box is used, selection can be made in “Select Items” window by using the control buttons.

- Name – setting of the file selection by name (part of the name);

- window toolbars:
  - “OK” – to confirm the settings and start the selection process;
  - “Cancel” – to cancel the settings and close the window.

File Data Display Windows

Text File Data Display Window

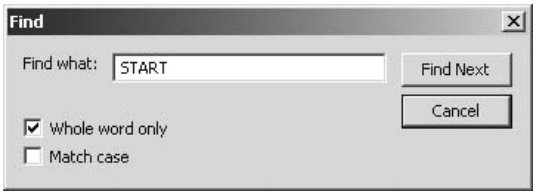

Text: C:\TRACK\020325.TXT
(UTC) 0°00.000 0°00.000 NO SECONDARY DR
HDG 0.0° LOG 0.0kt COG 0.0° SOG 0.0kt Av Speed 0.0kt
W dist(log) 0.0nm W dist(gnd) 0.0nm
CHARTS: WORLD (?? 19-12-96 V)
19:22:16 STOP
(UTC) 0°00.000 0°00.000 NO SECONDARY DR
HDG 0.0° LOG 0.0kt COG 0.0° SOG 0.0kt Av Speed 0.0kt
W dist(log) 0.0nm W dist(gnd) 0.0nm
CHARTS: WORLD (?? 19-12-96 V)
19:23:20 START
(UTC) 0°00.000 0°00.000 NO SECONDARY DR
HDG 0.0° LOG 0.0kt COG 0.0° SOG 0.0kt Av Speed 0.0kt
W dist(log) 0.0nm W dist(gnd) 0.0nm
CHARTS: WORLD (?? 19-12-96 V)
19:23:20 PRIMARY OFFSET 0°00.000 0°00.000
(UTC) 0°00.000 0°00.000 NO SECONDARY DR
HDG 0.0° LOG 0.0kt COG 0.0° SOG 0.0kt Av Speed 0.0kt
W dist(log) 0.0nm W dist(gnd) 0.0nm
CHARTS: WORLD (?? 19-12-96 V)
19:26:28 STOP
(UTC) 0°00.000 0°00.000 NO SECONDARY DR
HDG 0.0° LOG 0.0kt COG 0.0° SOG 0.0kt Av Speed 0.0kt

The Text File Data Display window is divided arbitrarily into two parts:

- toolbar;
- text display area.

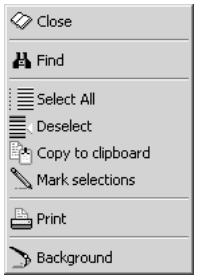
Toolbar

- To close the display windows;
- To print out the display window text;
- To open a text box for the input of a word or character in the text:
  – Find what is a line for the input of a word or character for search;



  – Whole word only – to search for a separate specified word;
  – Match case – to search by the first characters (Match whole word only function is required to be disabled);
  – "Find Next" – button moves the highlighting to the next found word (character);
  – "Cancel" – to close the window.
- To select the whole text;
- To cancel the text selection;
- To copy to the computer clipboard;
- To set the underlying surface for the text display area (white by default).

Text Display Area

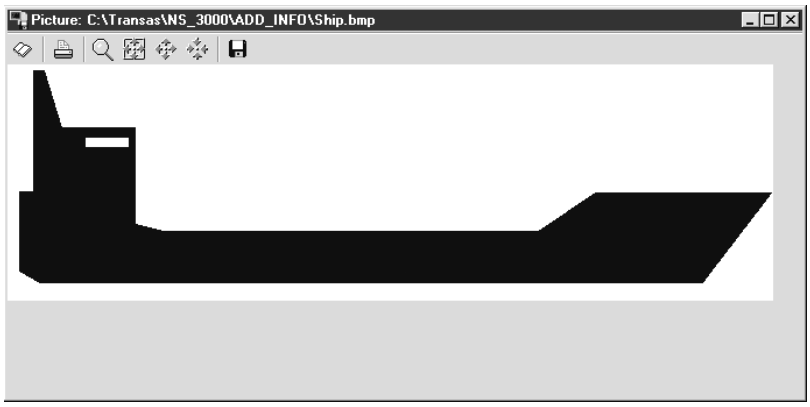


This area provides a Functional menu which is opened by pressing the right trackball/mouse button.

The menu operating principle is similar to the toolbar buttons, with a new function added.

Mark selections – to highlight the selected text in red colour (after the highlighting, access to the functions of font change and selection of the display area colour is disabled).

Graphic File Data Display Window



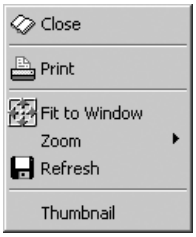
The Graphic File Data Display window contains the following parts:

- toolbar;
- display area.

Toolbar

- To close the display window;
- To print out the display area contents;
- To open Custom zoom window for setting the function multiplier;
- To set the display limits within the window;
- To increase the display scale;
- To reduce the display scale;
- To display on the original scale

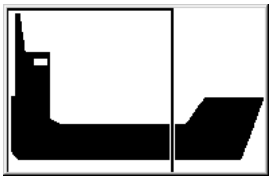
Display Area



This area provides a functional menu which is opened by pressing the right trackball/mouse button.

The menu operating principle is similar to the toolbar buttons, with a new function added.

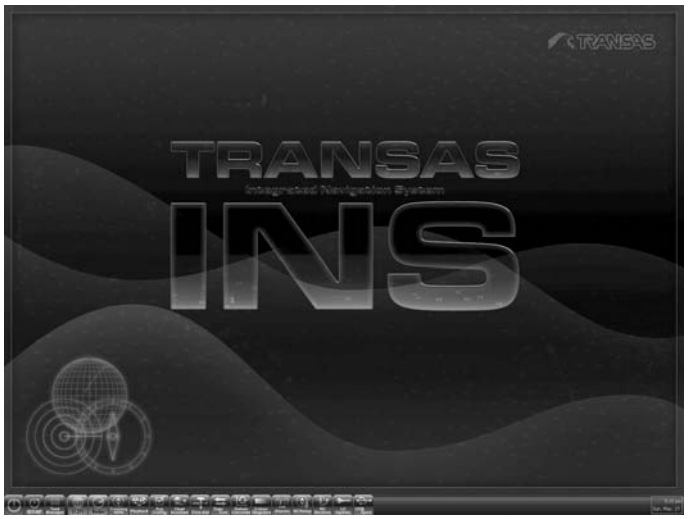
Thumbnail – to turn on the reduced picture with the display of the window limits (visible fragment) if the picture extends beyond them.



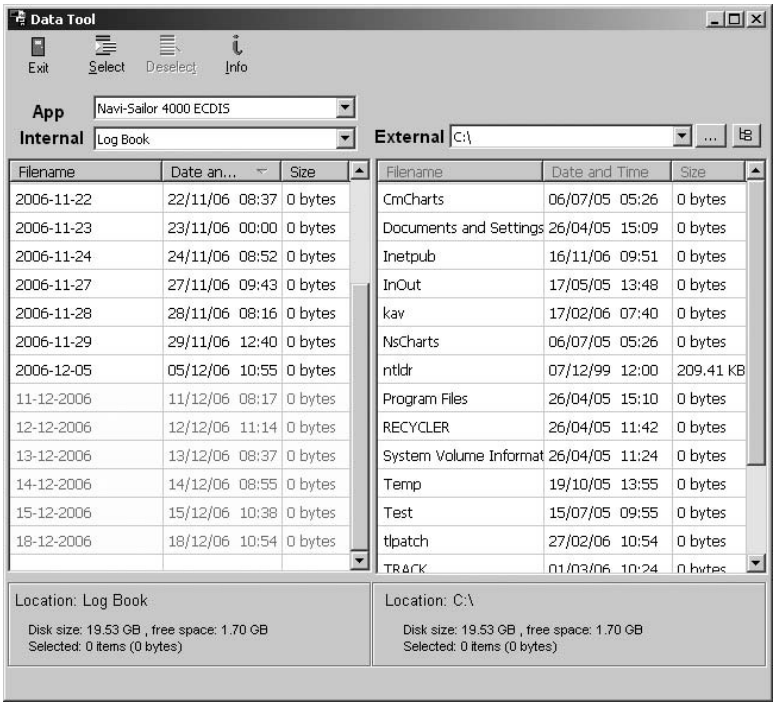
PROCESSING OF DATA FILES BY DATA TOOL UTILITY

Data Tool Start/Stop Operations

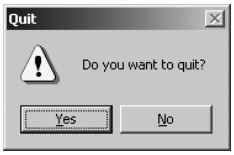
To start Data Tool utility press the button.



After the utility is run the screen displays a control window:



To exit from the Data Tool utility press the Exit button in the button area or button on the top right corner of the Data Tool window.

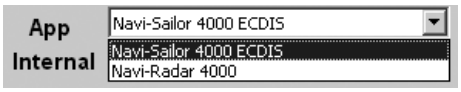


Press “Yes” button to confirm exit from the program.

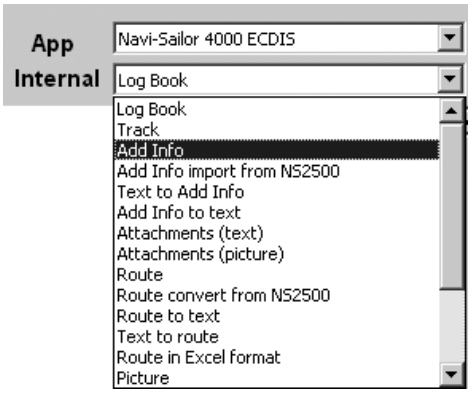
The program will be closed.

File Selection

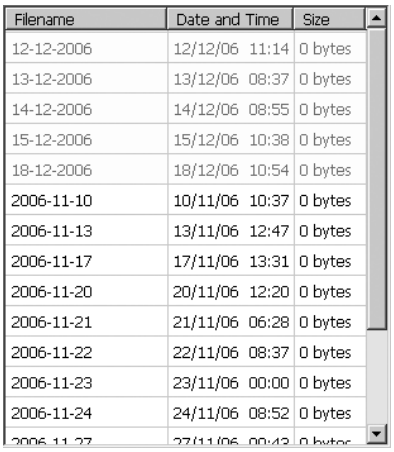
Select from the App drop-down list the necessary application.



In Internal group press button to display the list of files. A list of file groups will appear.

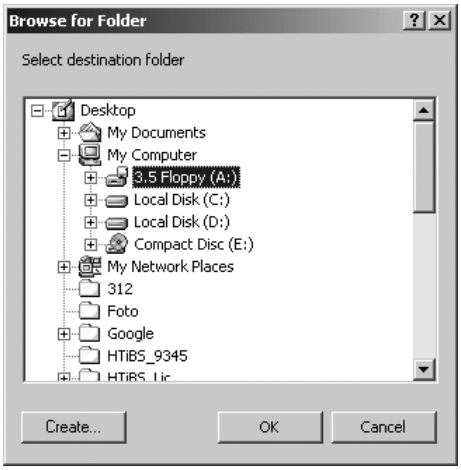


Position the cursor on the required group name and press the left mouse/trackball button. Internal line will display the name, whereas the left-hand window will display a list of available files.



Filename	Date and Time	Size
12-12-2006	12/12/06 11:14	0 bytes
13-12-2006	13/12/06 08:37	0 bytes
14-12-2006	14/12/06 08:55	0 bytes
15-12-2006	15/12/06 10:38	0 bytes
18-12-2006	18/12/06 10:54	0 bytes
2006-11-10	10/11/06 10:37	0 bytes
2006-11-13	13/11/06 12:47	0 bytes
2006-11-17	17/11/06 13:31	0 bytes
2006-11-20	20/11/06 12:20	0 bytes
2006-11-21	21/11/06 06:28	0 bytes
2006-11-22	22/11/06 08:37	0 bytes
2006-11-23	23/11/06 00:00	0 bytes
2006-11-24	24/11/06 08:52	0 bytes

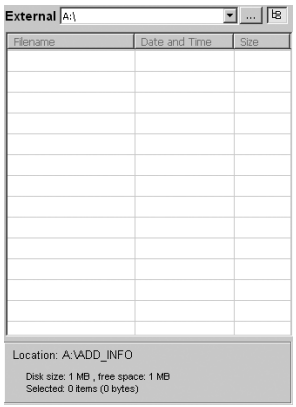
In External group press call button to the right of the window.



In the search and setting window, which will appear, specify the required device and the directory. Press “OK” button of the search and setting window.

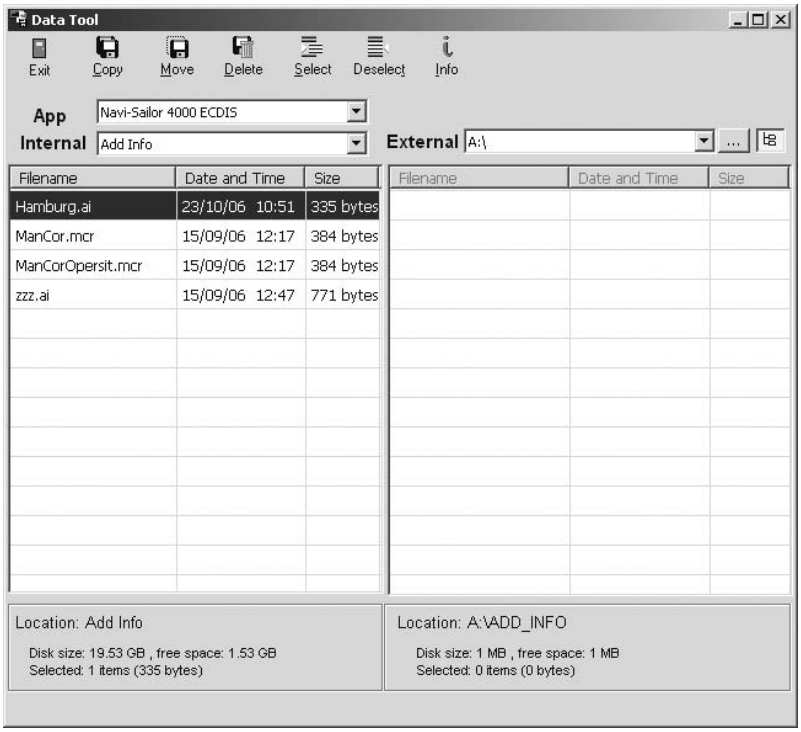
If it is necessary to create a folder in the selected directory for the storage of the copied file with the same name as in the INS (e.g., ADD_INFO), press the button.

The window will close down, the path to the directory will be specified in External line.



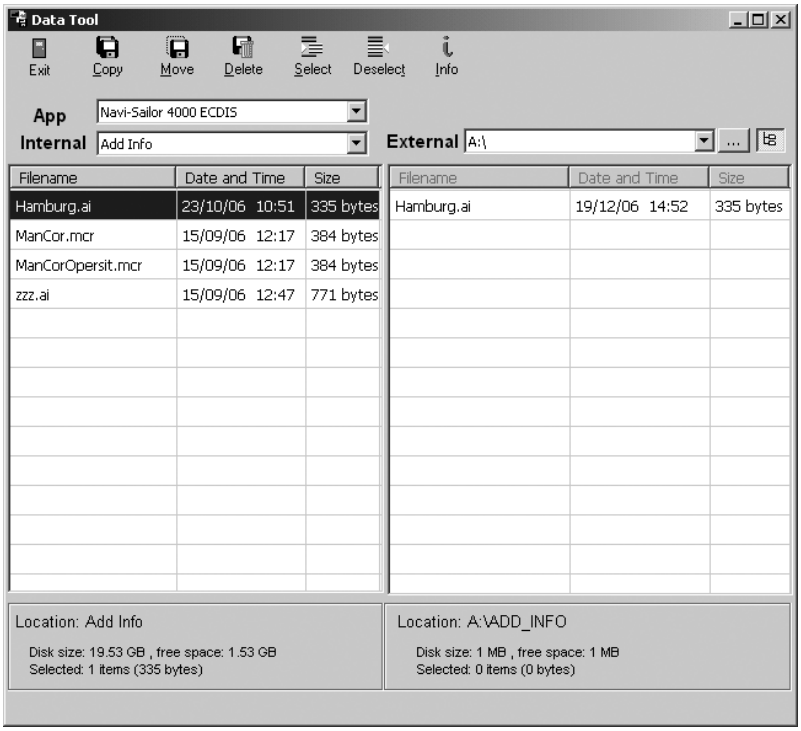
Copying Data onto External Carrier

In Internal group of the utility panel select the file, which should be copied onto the external device. In External group specify the folder where the selected file data will be copied to (see item above).



Press Copy button in the utility main menu.

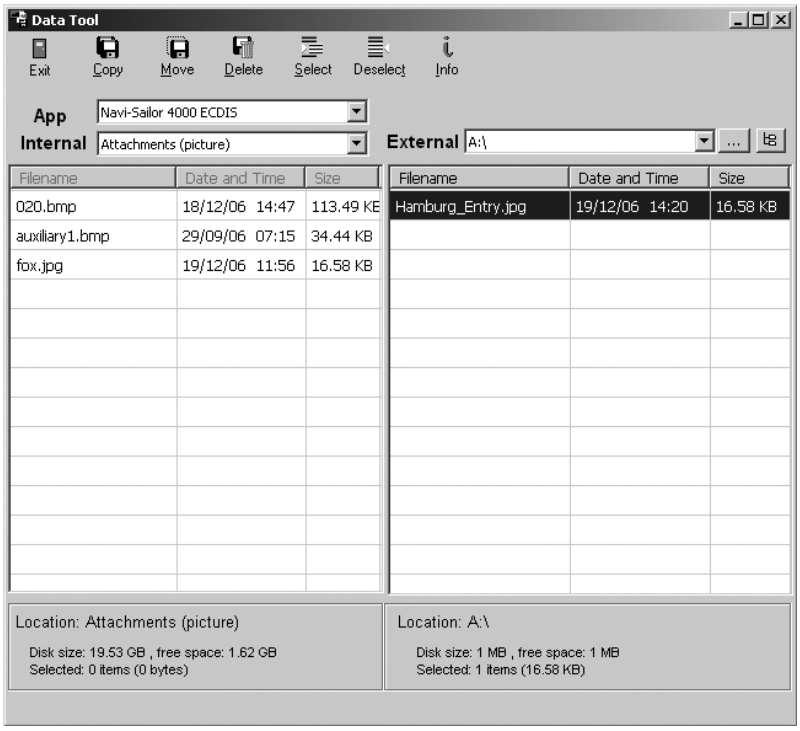
The name of and information on the file will be displayed in the right-hand window.



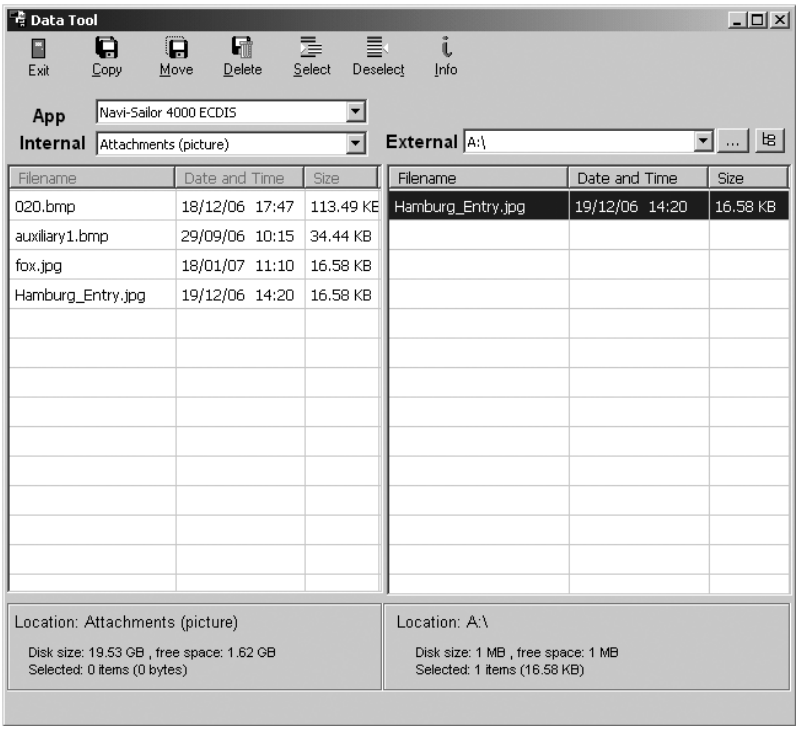
Copying Data from an External Carrier

In Internal group select the necessary file group (e.g. Attachments (picture)). In the External group specify the external device or folder with files to be copied the INS.

In the right-hand window specify the file, which has to be copied from an external carrier to the INS and press the left mouse/trackball button. The file will be highlighted.



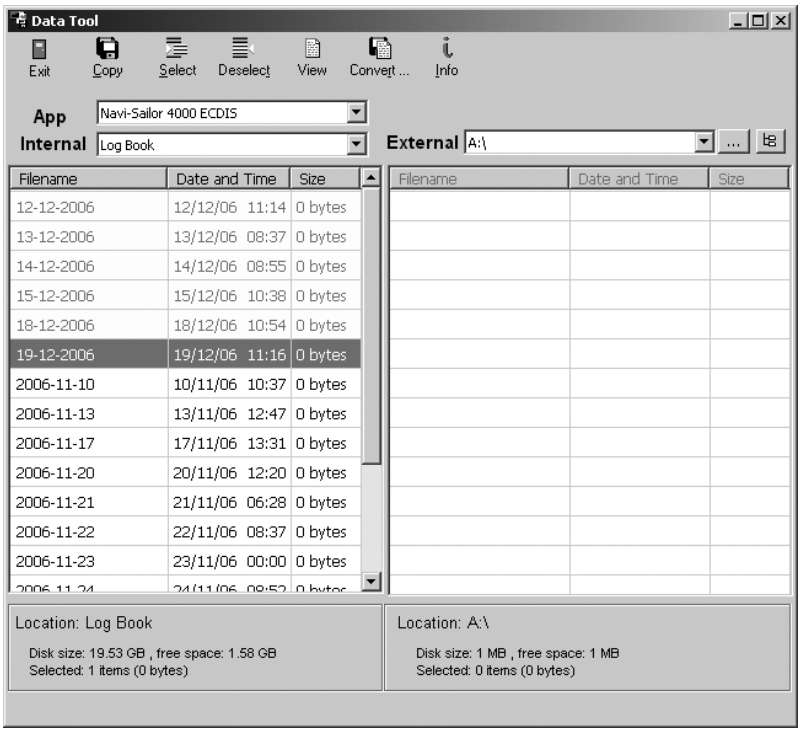
Press Copy button in the utility main window. The name of and information on the file will be displayed in the left-hand window with a list of files.



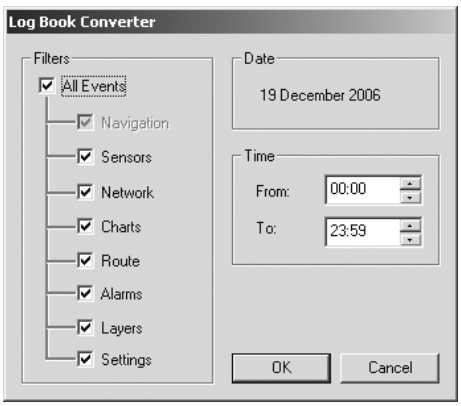
The copying is completed.

Converting of Electronic Ship Log Data File

In Internal group select Log Book file group. Position the cursor on the file, which should be converted and press the left mouse/trackball button.



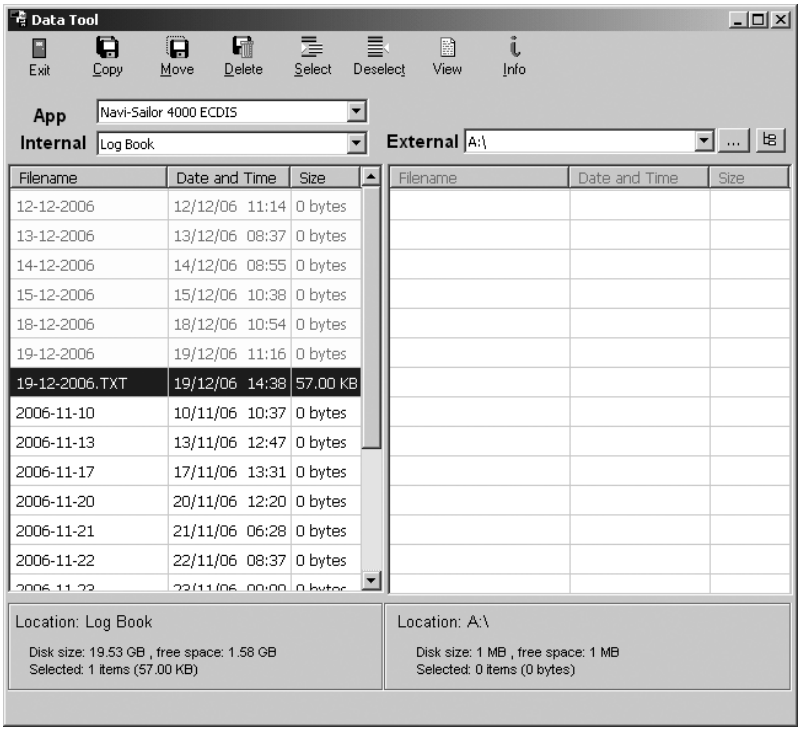
Press Convert button in the utility main menu. “Log Book Converter” window will open up.



In “Log Book Converter” window, which will open up, check the checkboxes in Filters group to display the necessary groups of events.

In Time group, set the time interval for converting the log data, which falls within this interval.

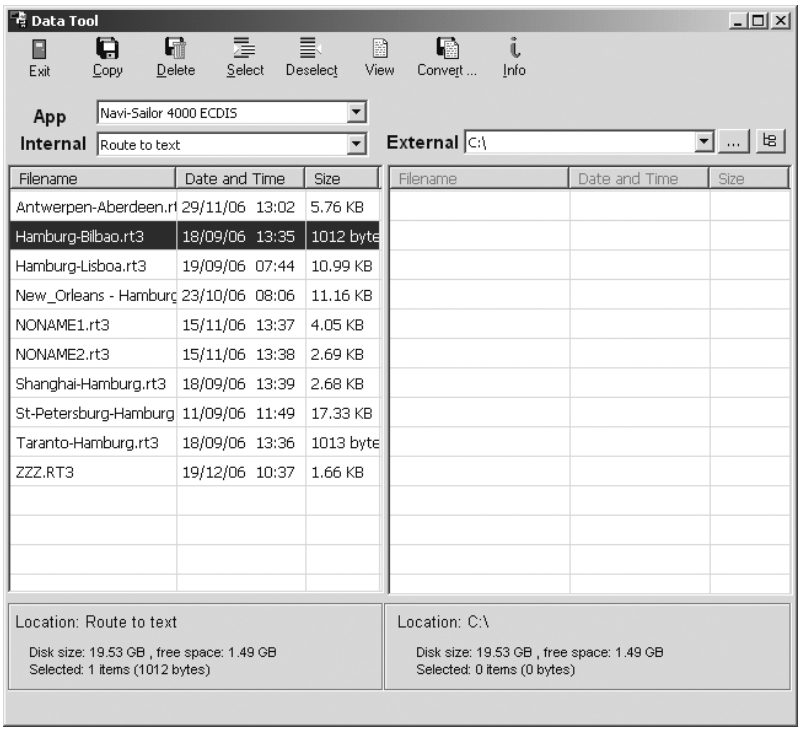
To confirm the settings you have made, press “OK” button in the bottom part of the window. The converted file will be added to the general file list with the same name and extension `*.txt`.



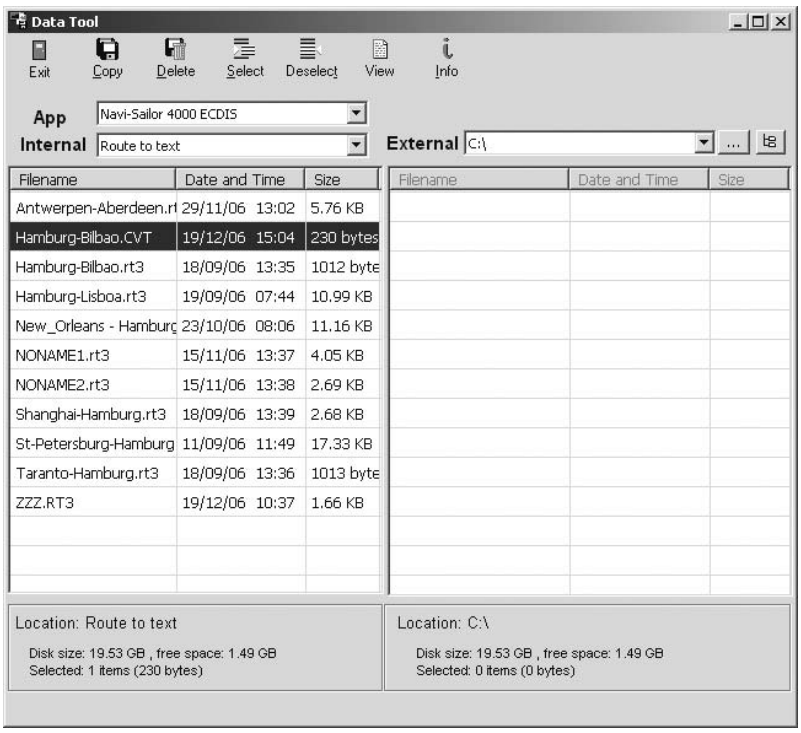
The converting process is completed.

Converting of Route Files to Text Files

In Internal group select Route to text file group. Position the cursor on the file, which has to be converted and press the left mouse/trackball button.



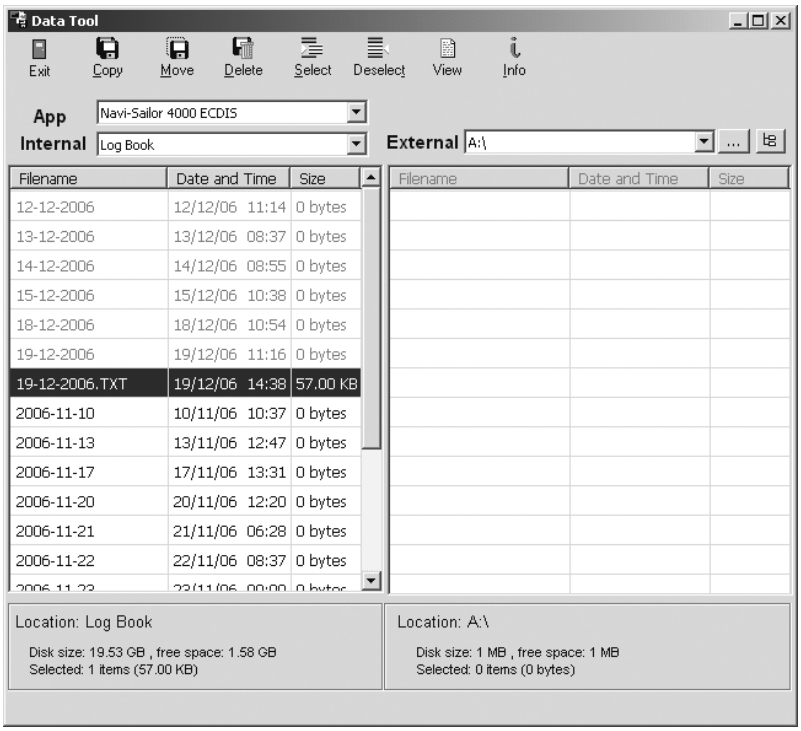
Press Convert button in the utility main window. The converted file will be added to the general list of files with the same name an extension: `*.cvt`.



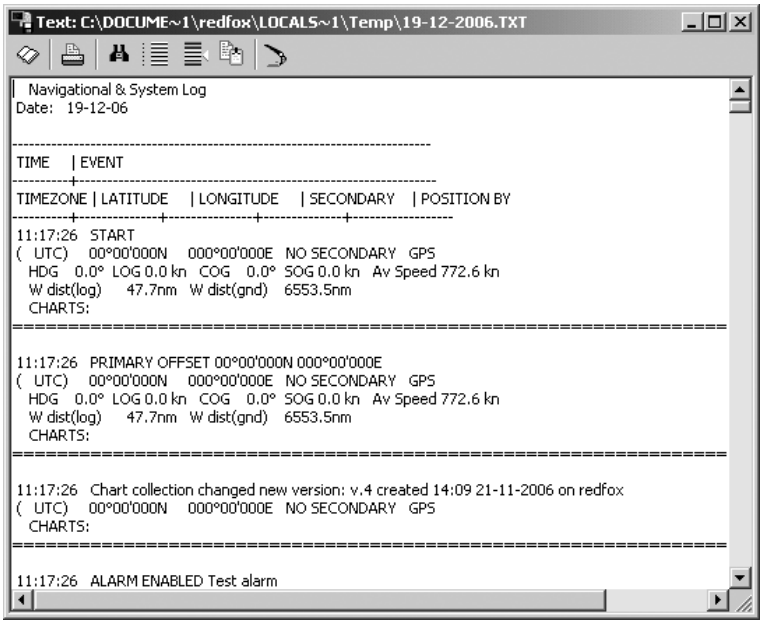
The converting process is completed.

Viewing and Printing out of File Data

In Internal or External group select the file, which should be printed out.



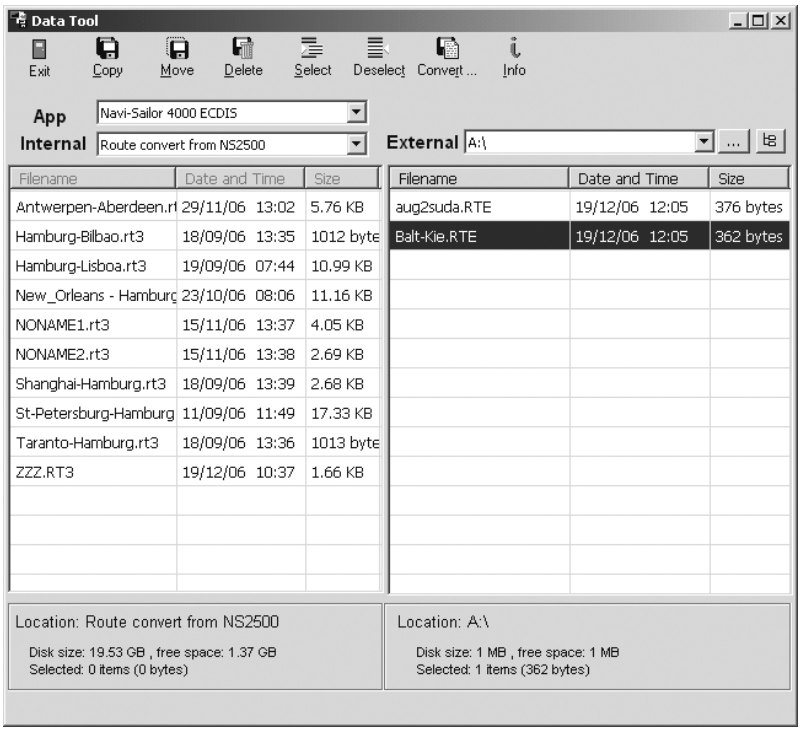
This file can be viewed if View button is activated in the utility main menu. Press View button to view the selected file.


Text: C:\DOCUME~1\redfox\LOCALS~1\Temp\19-12-2006.TXT
Navigational & System Log
Date: 19-12-06
TIME | EVENT
TIMEZONE | LATITUDE | LONGITUDE | SECONDARY | POSITION BY
11:17:26 START
(UTC) 00°00'000N 000°00'000E NO SECONDARY GPS
HDG 0.0° LOG 0.0 kn COG 0.0° SOG 0.0 kn Av Speed 772.6 kn
W dist(log) 47.7nm W dist(gnd) 6553.5nm
CHARTS:
11:17:26 PRIMARY OFFSET 00°00'000N 000°00'000E
(UTC) 00°00'000N 000°00'000E NO SECONDARY GPS
HDG 0.0° LOG 0.0 kn COG 0.0° SOG 0.0 kn Av Speed 772.6 kn
W dist(log) 47.7nm W dist(gnd) 6553.5nm
CHARTS:
11:17:26 Chart collection changed new version: v.4 created 14:09 21-11-2006 on redfox
(UTC) 00°00'000N 000°00'000E NO SECONDARY GPS
CHARTS:
11:17:26 ALARM ENABLED Test alarm

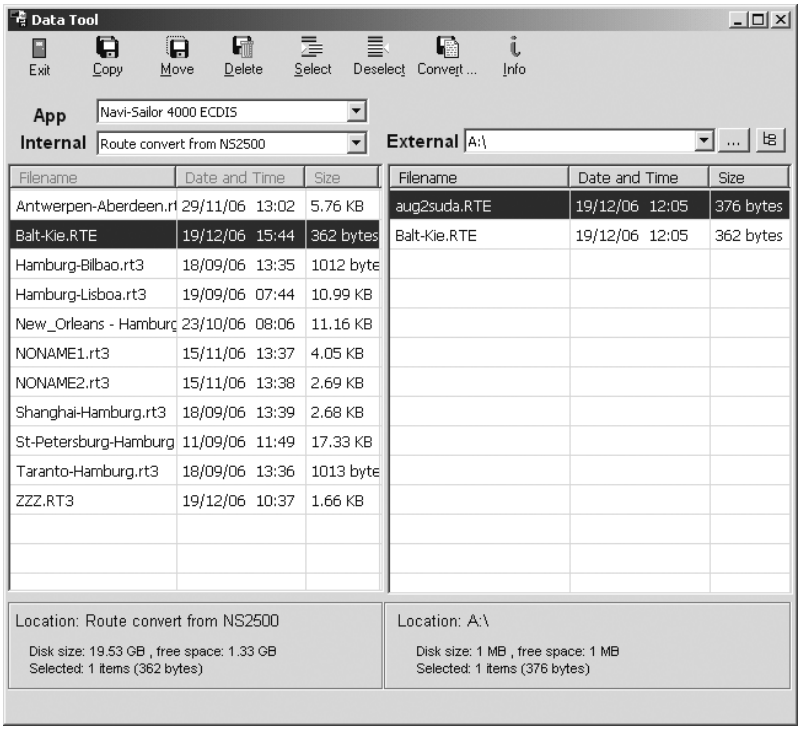
Press toolbar button in the window, which will open up the file contents are required to be printed out.

Converting of Route Files Used in the NS 2500 (2400)

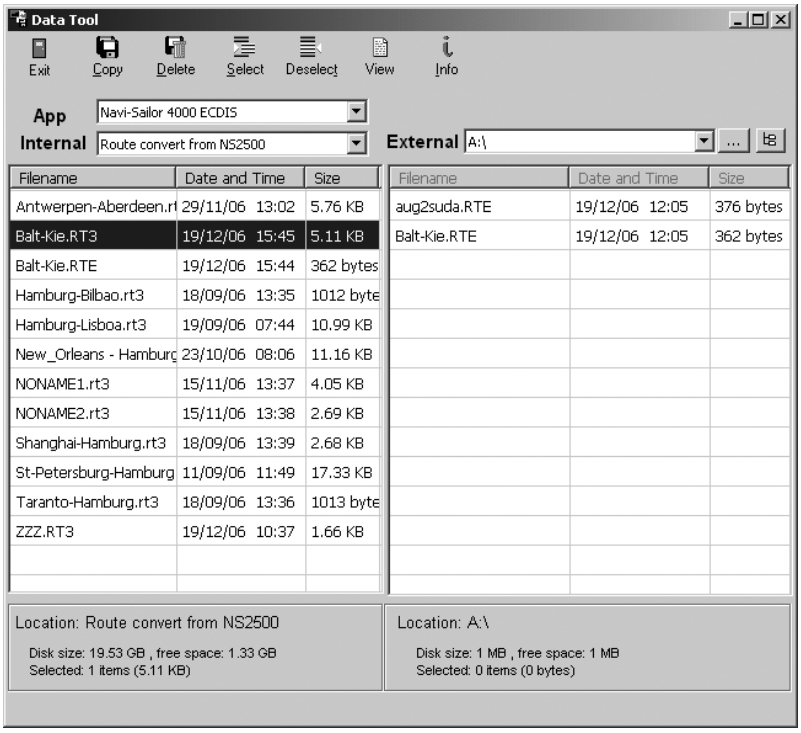
In Internal group select Route convert from NS 2500 file group. In the External group select the folder containing NS 2500 files and specify the files with *.RTE extension which should be converted.



Press Copy button in the utility main menu. The names of and information on the files will be displayed in the left-hand window with a list of files. In the Internal group select the file with *.RTE extension, which should be converted.



Press Convert button in the utility main menu. The converted file will be added to the general list of files with the same name and with `*.RT3` extension.



The converting process is completed.

CHAPTER 3

Datum Transformation Utility

This chapter provides a description of the utility which allows converting the digital values of geographic coordinates from the system selected by the user to WGS-84 datum (system of coordinates based on WGS-84 reference ellipsoid).

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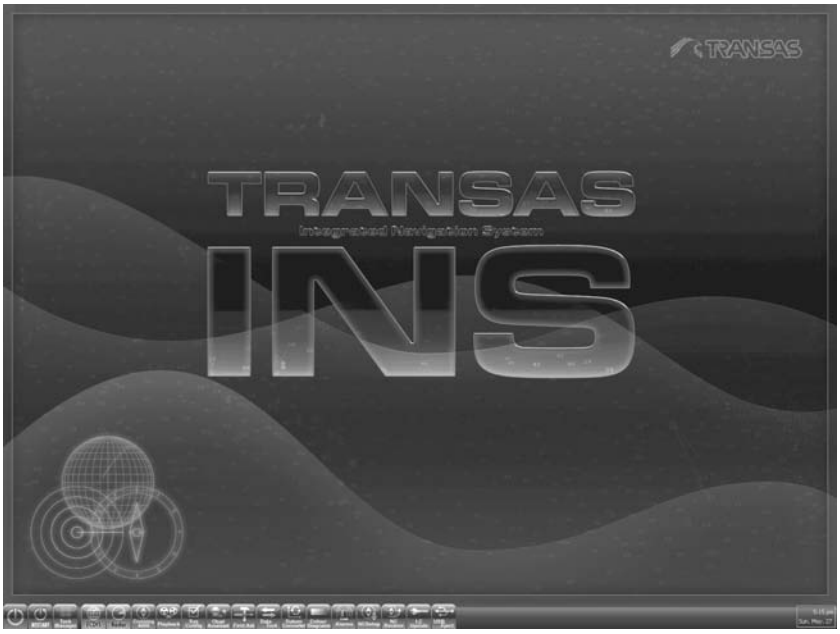
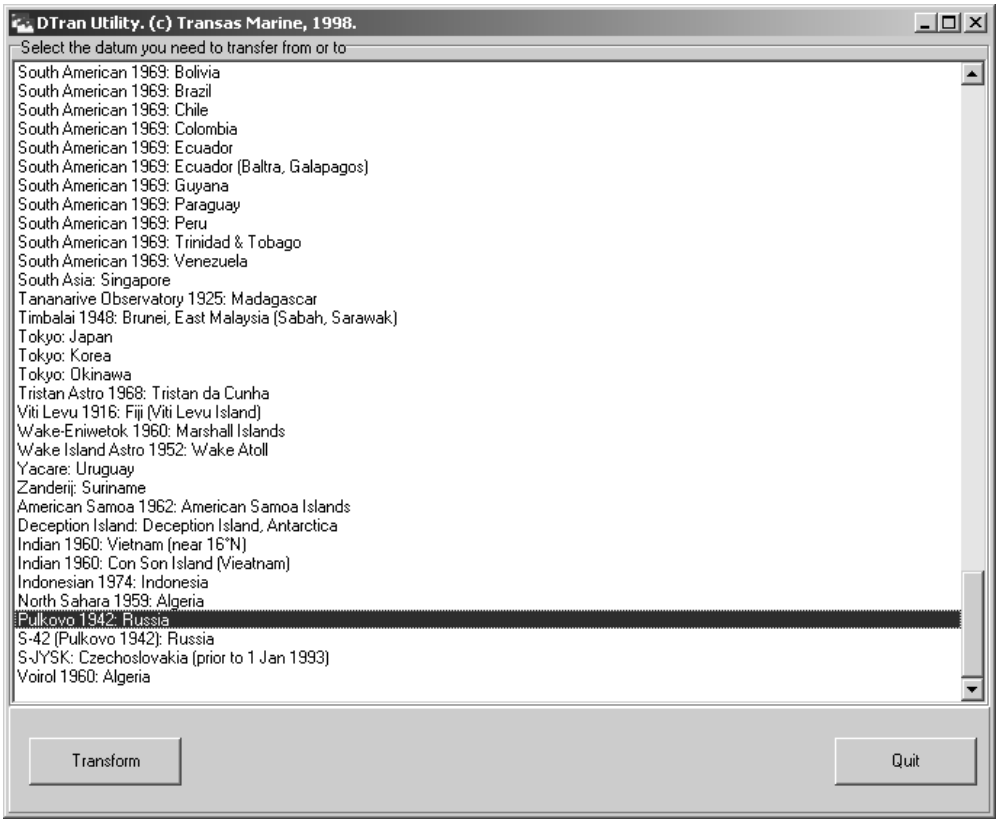
GENERAL

Datum Transformation utility is designed for converting the digital values of geographic coordinates from the system selected by the user to WGS-84 datum (system of coordinates based on WGS-84 reference ellipsoid).

Press the button for run Datum Transformation utility.



After the utility is run the screen displays a control window:

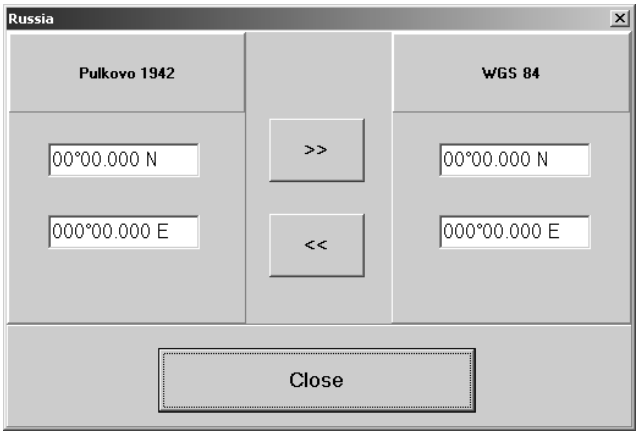

DTran Utility. (c) Transas Marine, 1998.
Select the datum you need to transfer from or to
South American 1969: Bolivia
South American 1969: Brazil
South American 1969: Chile
South American 1969: Colombia
South American 1969: Ecuador
South American 1969: Ecuador (Baltra, Galapagos)
South American 1969: Guyana
South American 1969: Paraguay
South American 1969: Peru
South American 1969: Trinidad & Tobago
South American 1969: Venezuela
South Asia: Singapore
Tananarive Observatory 1925: Madagascar
Timbalai 1948: Brunei, East Malaysia (Sabah, Sarawak)
Tokyo: Japan
Tokyo: Korea
Tokyo: Okinawa
Tristan Astro 1968: Tristan da Cunha
Viti Levu 1916: Fiji (Viti Levu Island)
Wake-Eniwetok 1960: Marshall Islands
Wake Island Astro 1952: Wake Atoll
Yacare: Uruguay
Zanderij: Suriname
American Samoa 1962: American Samoa Islands
Deception Island: Deception Island, Antarctica
Indian 1960: Vietnam (near 16°N)
Indian 1960: Con Son Island (Vieatnam)
Indonesian 1974: Indonesia
North Sahara 1959: Algeria
Pulkovo 1942: Russia
S-42 (Pulkovo 1942): Russia
S-JYSK: Czechoslovakia (prior to 1 Jan 1993)
Voirol 1960: Algeria
Transform
Quit

The utility is controlled by using the following facilities:

- cursor and trackball/mouse buttons;
- via the keyboard:
  - <Tab> for the successive switching of activity between the utility buttons and indicators;
  - Cursor control keys;
  - <Enter> for confirming the selection or digital value input.

The main window is designed for selecting the necessary system of coordinates.

The calculations window is displayed after pressure of Transform button.
It is designed for converting the coordinates from the system selected by the user to WGS-84 datum and the other way round.



After the utility is run, the screen displays the main window where the system of coordinates should be selected for the utility's further operation. Use Transform button to activate the calculations window. Enter the necessary coordinate value in their respective fields. Use >> and << buttons to have the coordinates re-calculated in the forward or reverse direction.

CHAPTER 4

Colour Diagrams Utility

This chapter provides a description of the Colour Diagrams utility.

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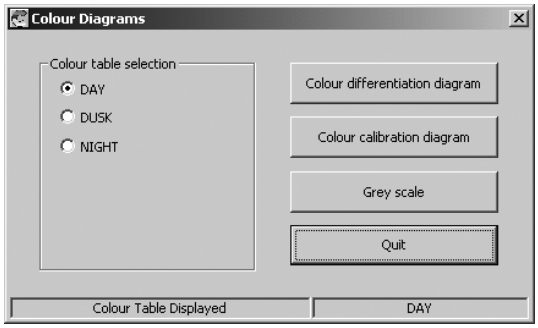
GENERAL

The Colour Diagrams utility is intended for determining the monitor screen capability to display the basic colour palette during the use of the ECDIS task.

The requirements to the utility are set forth in the document Special Publication No. 52, Annex A of Appendix 2, Edition 3.0, March 1997, Part III, Item 4.

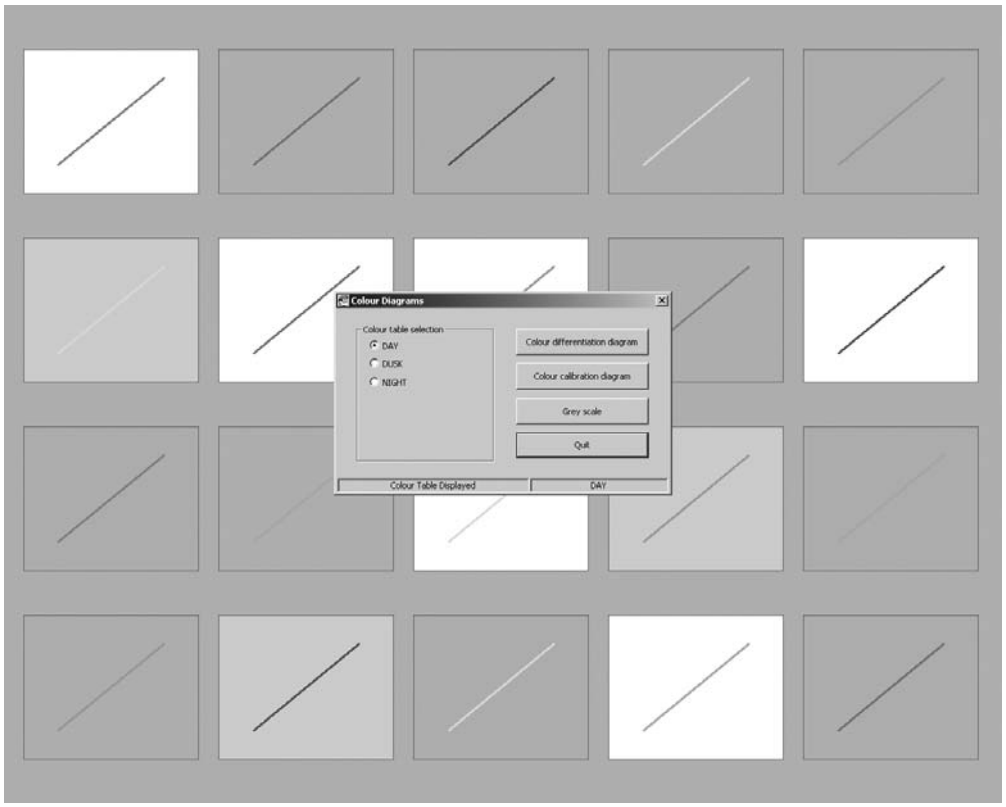


The utility's control window is designed for the utility adjustments:

- Colour table selection – setting of the test screen palette to suit the time of the day:
  - Day – daytime;
  - Dusk – dusk;
  - Night – night time.
- Colour differentiation diagram – display of a test palette in the colour mode;
- Colour calibration diagram – display of test screen for the check of the monitor calibration in accordance with IEC 61174 (item 6.7.3.2 Independent monitor):
  - Brightest white (CHWHT);
  - Brightest magenta (CHMGF);
  - Brightest yellow (CHYLW);
  - Brightest grey (BKAJ2).
- Grey scale – display of a test palette in a monochrome mode;
- Quit – exit from the utility.

Press the button for run Colour Diagrams utility.

After the utility is run the screen displays a control window against the background of a colour diagram.



To perform the testing adjusts in turn a parameter (Colour Table Selection) and press Colour diagram, Colour calibration diagram or Grey scale buttons of the utility control window.

ATTENTION!

Type of the displayed test screens depends on the selected monitor type set in System Configuration utility on “Display” page.

CHAPTER 5

Description of Play Back Utility

This chapter provides a description of the utility which allows the display of the INS archive information.

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SOFTWARE DESCRIPTION

Purpose

Play Back utility is designed for playing back information archived by the INS system in the process of operation. The utility provides the following capabilities:

- playback of the ownship track and motion parameters;
- playback of echosounder, wind and water temperature data;
- playback of route monitoring data;
- playback of targets tracks received from AIS, ARPA and Seetrac sensors;
- playback of the radar picture;
- playback of the entire navigational situation for the selected moment of time;
- printing out of the electronic ship logbook fragments, route and schedule data.

ATTENTION!

As utility operation is connected with functions used by the ECDIS and RADAR tasks, their concurrent operation is impossible.

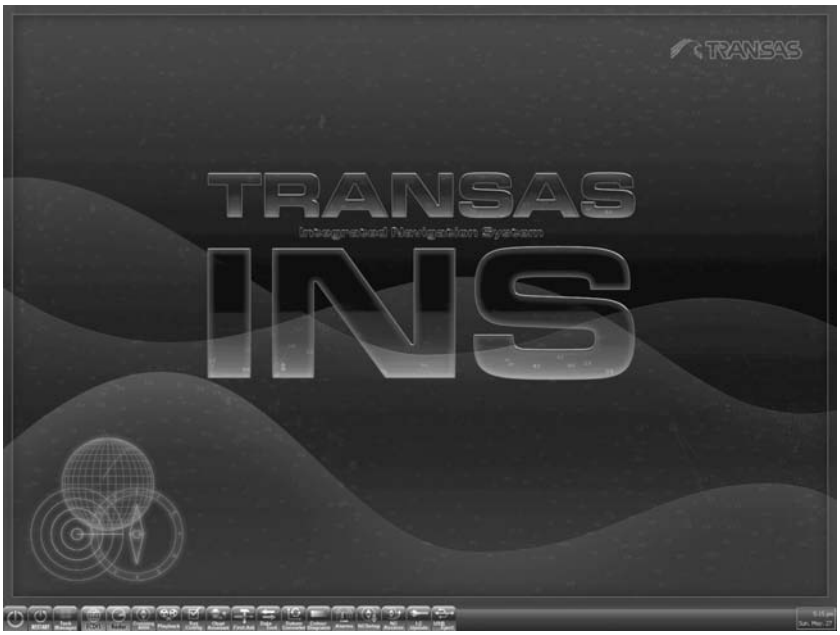
In addition to the control “Play Back” window, the set of the utility windows and panels is similar to that in the ECDIS task, with some of the functions disabled. The list of the effective panels and disabled functions is provided in the table (for the information on functions see the relevant windows and panels described in the ECDIS task).

Panel name	Possibility to use the functions
Chart	The entire functionality is available
Control	The following functions are disabled: • AIS Messages display – all functions; • AIS VLD Data display – all functions; • Radar Settings display: – Display adjustment functions (Gain, Rain and Sea); – Range group function, ARPA Setting button
Config	The following functions are disabled: • Time Zone page functions; • COMTrace page functions
Monitoring	The following functions are disabled: • “Route Monitoring” page: – Track colour functions in Track settings area. • “Navigational Alarms” page: – The entire functionality is available
Navigation	All the functions are disabled
Route Editor	The entire functionality is available
Add Info	All the functions are disabled except: • ON button; • Delete chart button; • Show Objects button; • Show Attachments button; • Attachments button; • Deleted button; • Colour button

Panel name	Possibility to use the functions
Manual Correction	All the functions are disabled except: • ON button; • Attachments button; • Deleted button; • Colour button
Targets	The following functions are disabled
AIS	All the functions are disabled
Log Book	The following functions are disabled: • Entry button function; • Reset Dist button function
Chart	The entire functionality is available
Tasks	The entire functionality is available
Info	The entire functionality is available

Play Back Control Window

Press button for run Play Back utility.



After the utility is run the screen displays a control window:

“Play Back” window is intended for the selection of the date and time which the situation should be played back for, and for the control of its playback. The window contains the following elements:

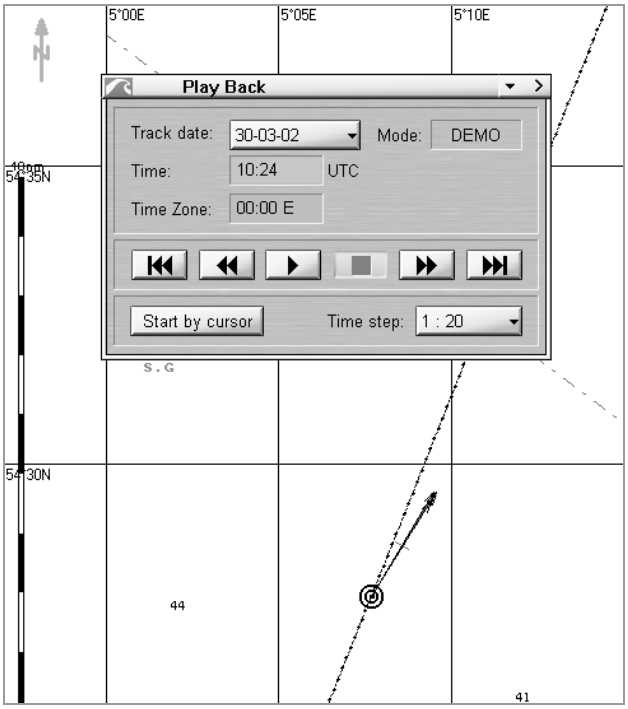
- Track date – to select the date of the situation to be played back from the list;
- Time – to set and display the played back situation start time;
- Time Zone – to display the time zone which was set at the time when the played back situation was recorded;
- Mode – to display one of the following operating modes:
  - DEMO – situation playback settings mode. This mode is used for setting the situation playback start date and time, as well as the playback time step. All the ECDIS functions are operating but the tracks are not played back, targets are not displayed and the ship remains stationary in a fixed position;
  - SELECT – mode for setting the point on the ownship track which the situation playback is started from. The place is selected by using the trackball/mouse or <↑↓> keyboard keys on the Chart panel;
  - REPLAY – playback of the situation. This is a playback of the situation selected for viewing. The position of the ships, targets positions and their motion vectors are reconstructed from the day archive files. At the moments of time which correspond to the whole minutes of the modeled time, all the ships are placed in the recorded coordinates. In the time intervals between the minutes, the ships are moving along the straight line towards the next point. The targets' motion vectors are smoothened out from minute to minute.
- The toolbar contains the following buttons:
  - to move the ship to the beginning of the track of the selected day file;
  - to start the fast-time ship motion back from the current position;
  - to start the situation playback process (Replay);
  - to stop the situation playback (switch to Demo state);
  - to start the fast-time ship motion forward from the current position;
  - to move the ship to the end of the track of the selected day file.
- Start by cursor – to set the played back situation start point with a trackball/mouse or <↑↓> keyboard keys. As this is done, the ship moves on the Chart panel to the point corresponding to the set time. The time is changed (incremented/decremented) with 1 minute discretion;
- Time Step – to select time scale for the played back situation.

Playback of the Own Ship Track in Play Back Utility

The own ship position and its motion parameters (HDG/STW/COG/SOG) are reconstructed from the day archive files `InsTrack.trk`.

There are two ways to display the own ship track:

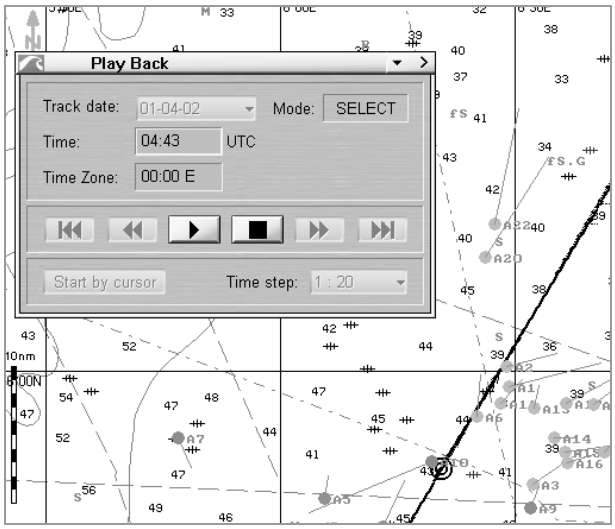
- statically (own ship track);
- dynamically (as the events are played on the time scale set by the operator, the ship symbol motion is shown, too); at the moment of time set by the operator and corresponding to the 10 sec time points of the modelled time, the own ship symbol is positioned in the recorded coordinates; in the intervals between 10 sec time points, the ship is moving along the straight line towards the next point. As the last point recorded for the given segment is approached, the playback is stopped. If it is necessary to change the situation playback step, Time Step function is used. A press on Start by cursor button will allow the situation to be played back by using the trackball (mouse) or <↓↑> keys.



Playback of Target Tracks in Play Back Utility

Play Back utility implements a dynamic graphic display of the target data. Targets' coordinates and their motion parameters are reconstructed from the archive day `InsTargets.tgt` files. At the moments of time corresponding to the time points of the modelled time, all the targets are positioned in the recorded coordinates. These points can correspond to the 10th, 20th or 60th second of every minute depending on the settings made in the System Configuration utility as of the recording moment.

In the time intervals between this points, targets are moving along the straight line towards the next point. Therefore, the targets' vectors are "smoothed out" in accordance with the recording discretion. For the fast-time playback, the operator can set the time scale for the targets' motion.



Playback of Radar Overlay in Play Back Utility

The radar overlay is played back in accordance with the date and time selected by the operator. The "picture" is changed with a frequency, which was set in the recording interval parameter, the modeled time scale taken into account. The playback duration depends on the recording duration. The recording interval (from 1 hour to 240 hours) and discretion (from 1 to 60 seconds) are set in the System Configuration utility during the installation (see TRANSAS INS (V. 1.11.002). INSTALLATION GUIDE, chapter System Settings, section Transas INS Configuration, paragraph Radar Settings). If there is no radar overlay data for a certain moment of time, the playback is stopped.

Playback of Other Data

The echosounder, wind, water temperature and route monitoring data (XTD, time of the monitored route loading/unloading) are stored in the `InsTrack.trk` day files. The monitored route itself is stored separately in the daily folder. During the playback, this data is reproduced with a direction set for its recording in the System Configuration utility:

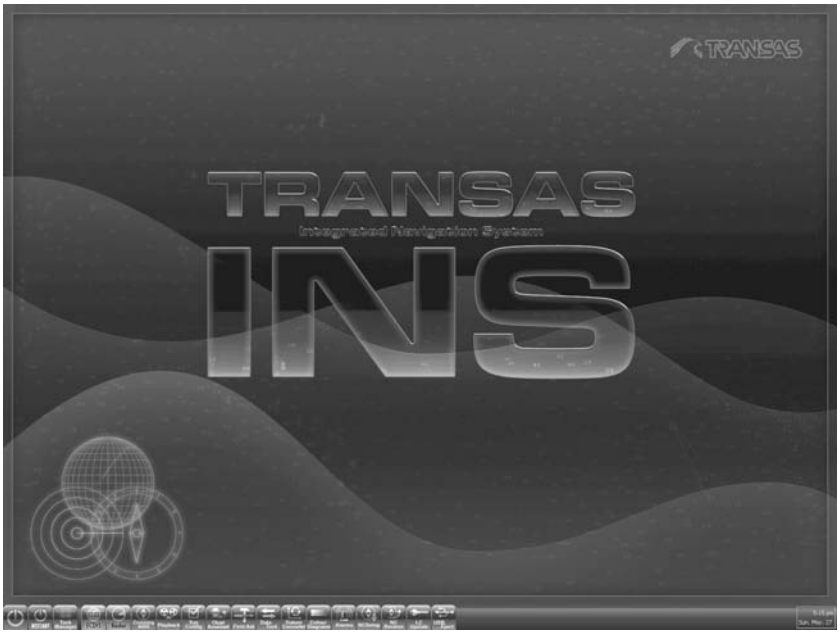
- echosounder – 10 or 20 sec;
- wind – 10, 20, 30 and 60 sec;
- water temperature – 20, 30 or 60 sec;
- route monitoring data – 10 or 20 sec.

The monitored route itself is loaded for the reproduction on the chart panel is loaded for the `Route` subfolder of the daily folder where it is stored.

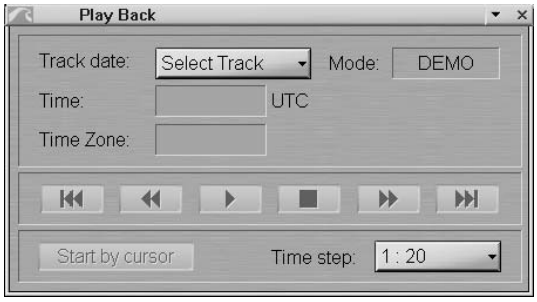
USING OF PLAY BACK UTILITY

Play Back Start/Stop Operations

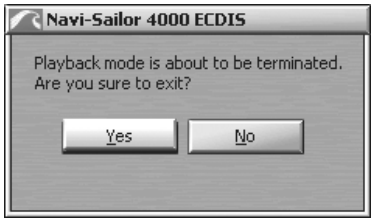
Press the button for run Play Back utility.



After the loading, the utility panel with “Play Back” window will appear:



To exit from the Play Back utility press button on the top right corner of the “Play Back” window:

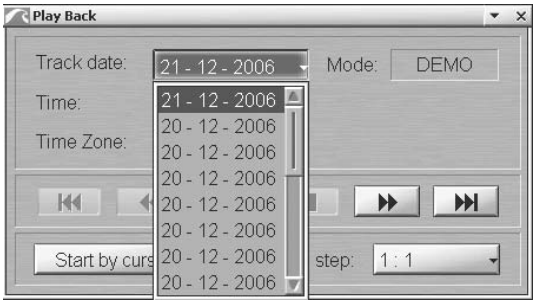


Press “Yes” button to confirm exit from the program.

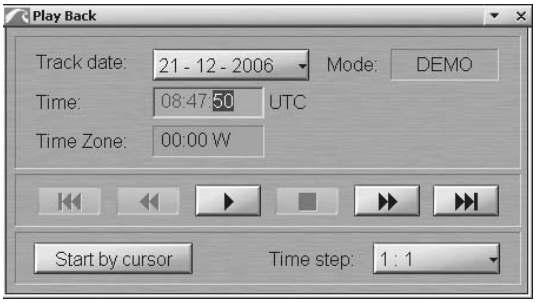
The program will be closed.

Viewing Recorded Data

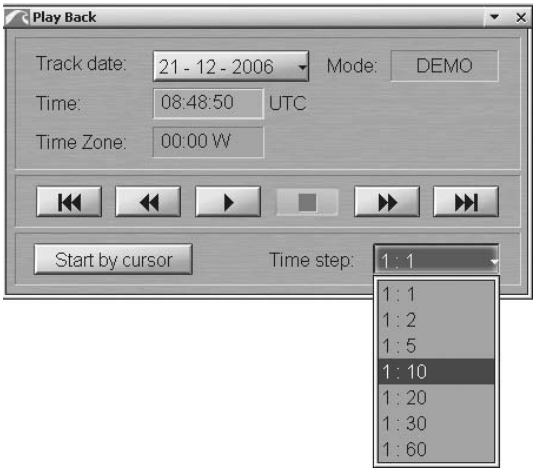
Press Track date button in the top left corner of “Play Back” window.



In the list, which will open up, select the required date and press the left mouse/ trackball button. The Chart panel will display the tracks of the own ship and targets as of the selected date. Use Time input line to enter the value of the time, which the dynamic display is required to start from, and press <Enter> key.



Press Time step button in the right bottom part of the window.

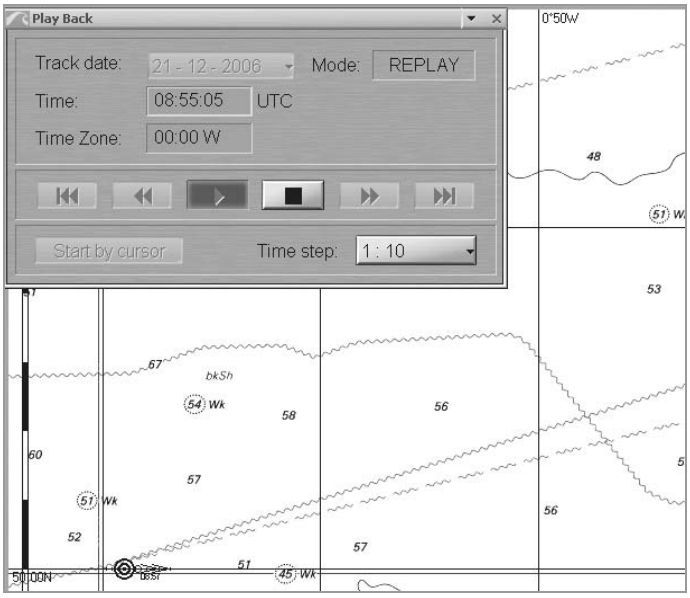


In the list, which will open up, select the situation playback scale relative to the real time and press the left mouse/trackball button.

Make the necessary adjustments as required by using the functions similar to the ECDIS environment functions.

Press ▶ playback start button.

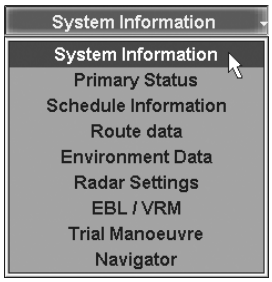
"Replay" message will appear in Mode line in the top right corner of the panel, whilst on the Chart panel the ship motion will be played back on the set time scale.



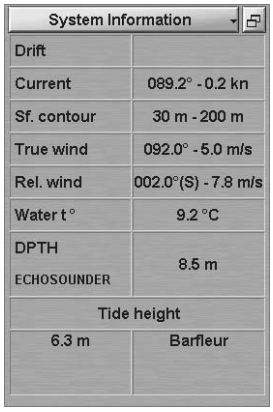
For the fast time presentation, press ■ button and then ▶▶ button.

To set the own ship symbol in the point on the own ship track, which the situation playback should be started from, and press Start by cursor button. Set the ship symbol in the required track point by using the mouse/trackball, and press the left button. The playback of motion will start from the point where the ship symbol was set. With Start by cursor button depressed, using the mouse/trackball or <↑↓> keyboard keys with discretion of 1 minute can play the motion of the own ship and targets back.

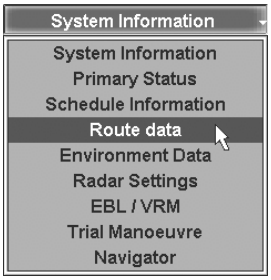
To viewing echo sounder, wind and water temperature data press the button with the name of the set display in "Display Panel" window of the Control panel.



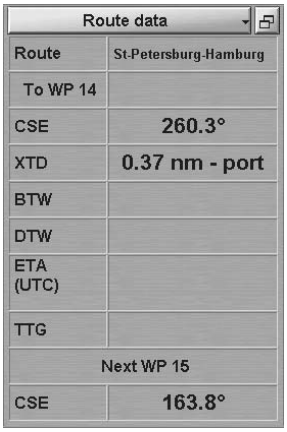
In the list, which will open up, select System Information line and press the left mouse/trackball button.



In the playback, the monitored route will be displayed on the chart panel at the moment when its was loaded. To viewing monitoring route data press the button with the name of the set display in “Display Panel” window of the Control panel.



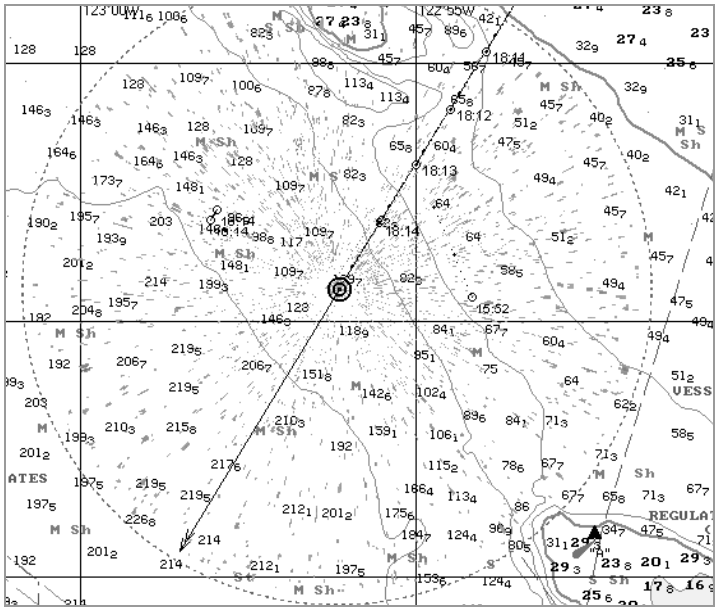
In the list, which will open up, select Route data line and press the left mouse/trackball button.



To turn on the radar picture display, press Overlay button in “Sensors and Network” window on the Control panel.

Make the necessary adjustments as required by using the functions similar to the ECDIS environment functions.

On the Chart panel there will be a dynamic playback of the ship motion and radar picture on the set time scale.



CHAPTER 6

Description of First Aid Utility

This chapter provides a description of utility, which allows identifying some problems in the process of INS operation.

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SOFTWARE DESCRIPTION

Transas INS First Aid utility means separate use for testing INS and CONNING task.

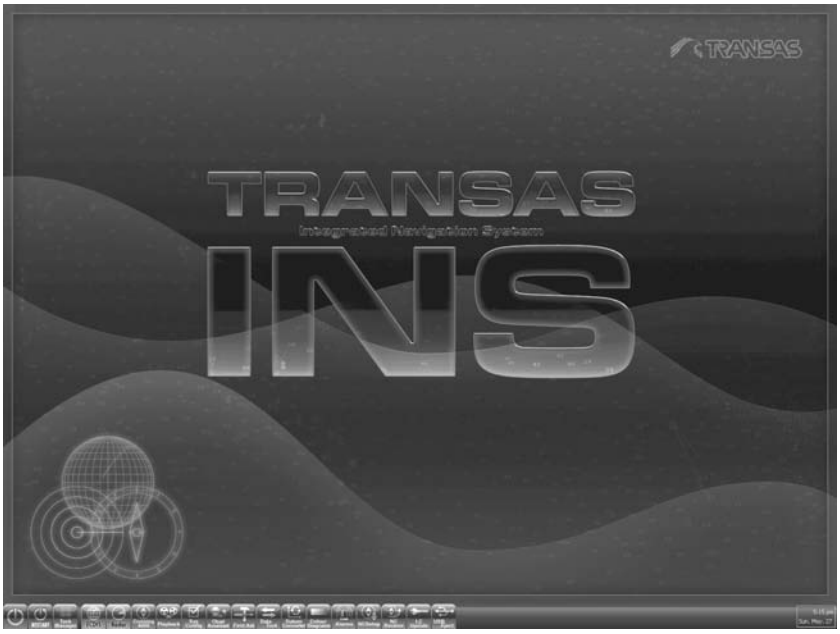
When used for the Transas INS product, the First Aid utility is intended for the following operations:

- INS system diagnostics;
- OS settings diagnostics;
- INS system troubleshooting;
- collection of data required for INS system warranty servicing;
- compiling or a request for INS system maintenance;
- activation of “sleeping” dongles.

In case of using for CONNING task First Aid utility can perform the following functions:

- to offer recommendations on the elimination of typical faults which occur in operating the Conning system;
- to draw a troubleshooting report to be sent to the company for the following servicing.

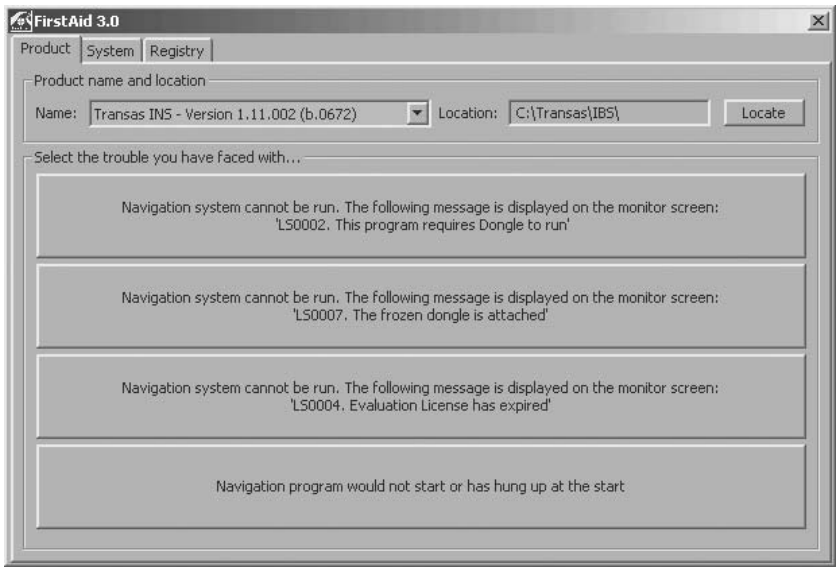
Press the button for run First Aid utility.



After the utility is run the screen displays a control window.

Product Page

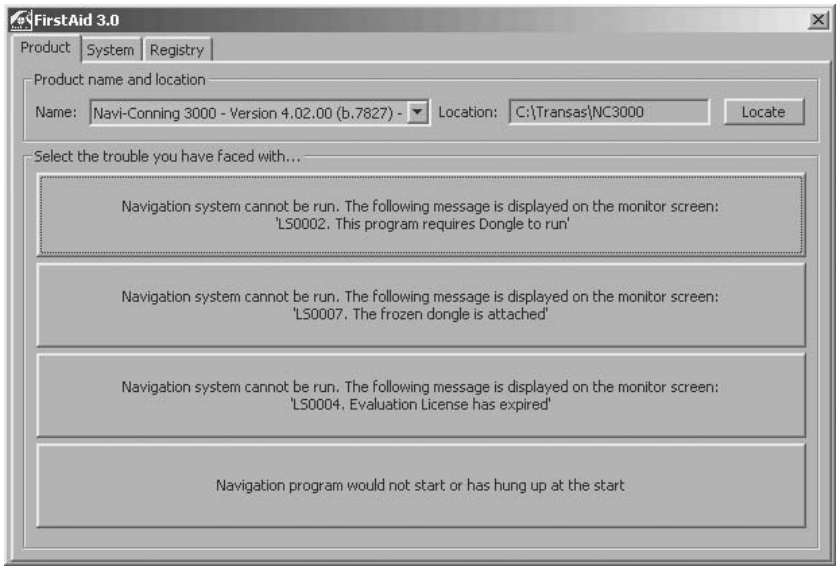
- Transas INS “Product” page:


FirstAid 3.0
Product
System
Registry
Product name and location
Name:
Transas INS - Version 1.11.002 (b.0672)
Location:
C:\Transas\IBS\
Locate
Select the trouble you have faced with...
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0002. This program requires Dongle to run'
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0007. The frozen dongle is attached'
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0004. Evaluation License has expired'
Navigation program would not start or has hung up at the start

The diagnostics call buttons contain the name of the problem and are arranged in the central part of the utility “Product” page. “Troubleshooting” functions serve for the diagnostics/elimination of problems which the user may encounter during the system operation.

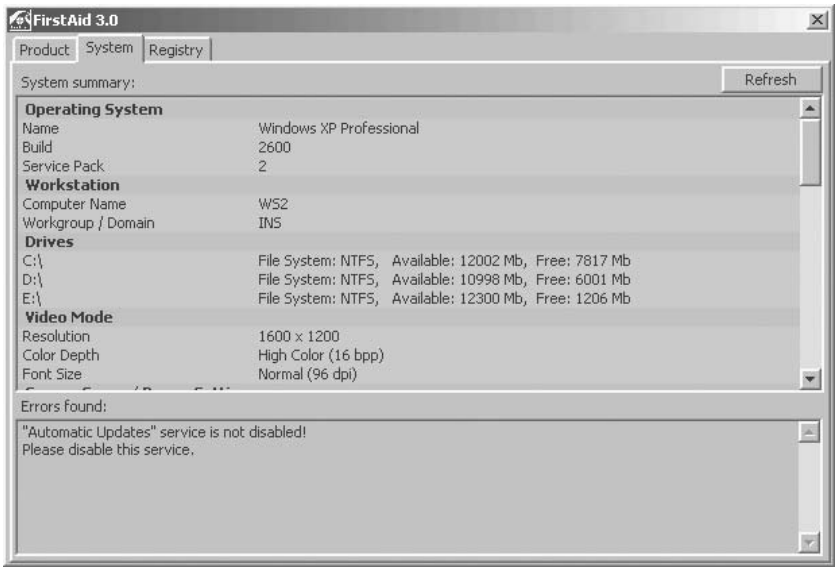
The diagnostics represents a dialogue mode whereby the user is provided with recommendations for the solution of a certain problem. The last recommendation is each case is Make Report, i.e. an offer to collect information and send an appropriate inquiry to the Transas Company.

- Navi-Conning 3000 “Product” page:


FirstAid 3.0
Product
System
Registry
Product name and location
Name:
Navi-Conning 3000 - Version 4.02.00 (b.7827) -
Location:
C:\Transas\NC3000
Locate
Select the trouble you have faced with...
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0002. This program requires Dongle to run'
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0007. The frozen dongle is attached'
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0004. Evaluation License has expired'
Navigation program would not start or has hung up at the start

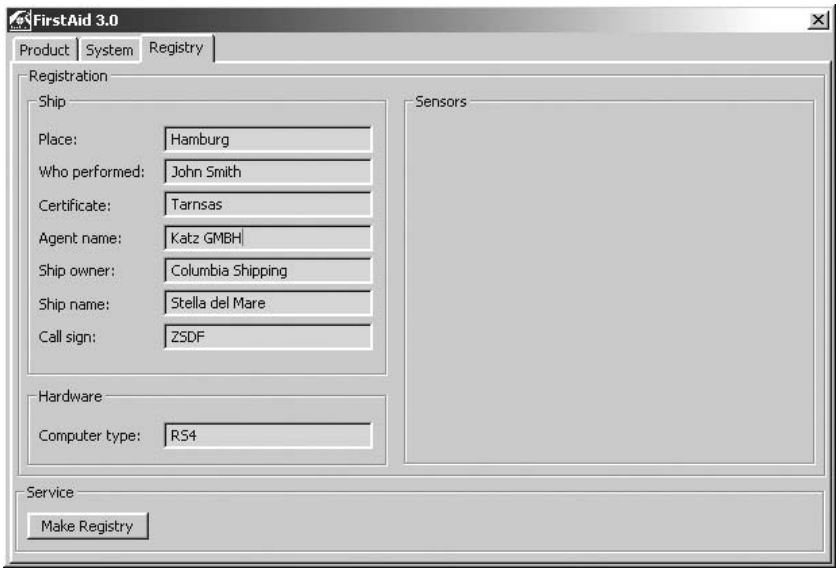
System Page

The First Aid utility's "System" page is designed for the display of OS testing results. This page is identical for both, Transas INS and the CONNING task.



Registry Page

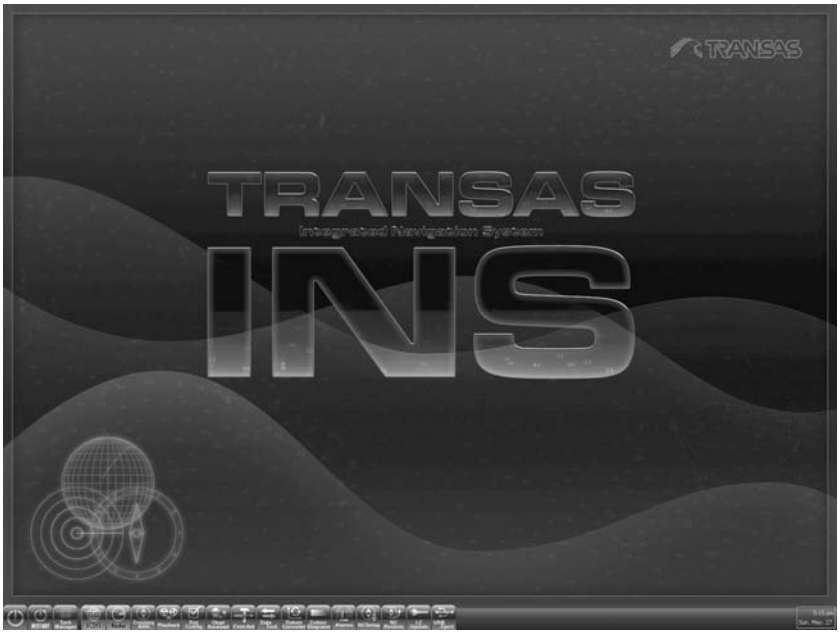
The First Aid utility's "Registry" page is designed for the product registration, and is used by the service engineer only. This page is identical for both, Transas INS and the CONNING task.



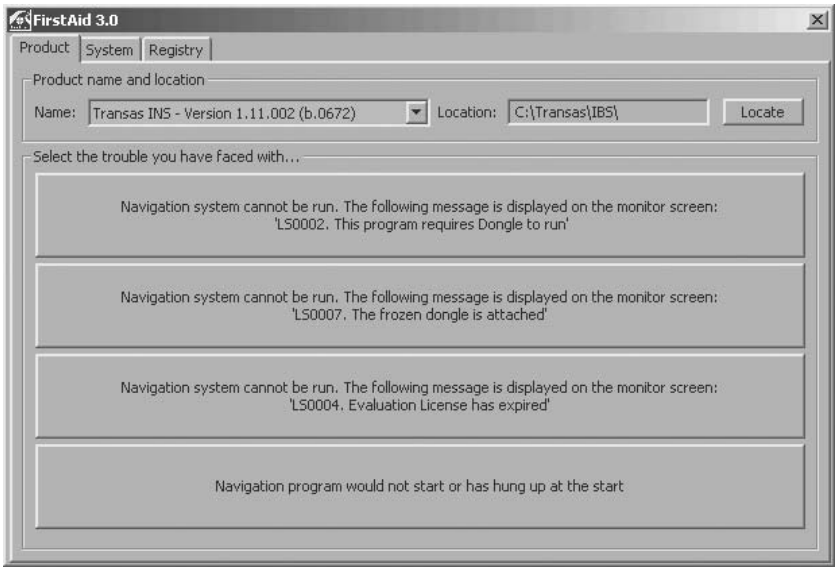
USING OF FIRST AID

First Aid Start/Stop Operations

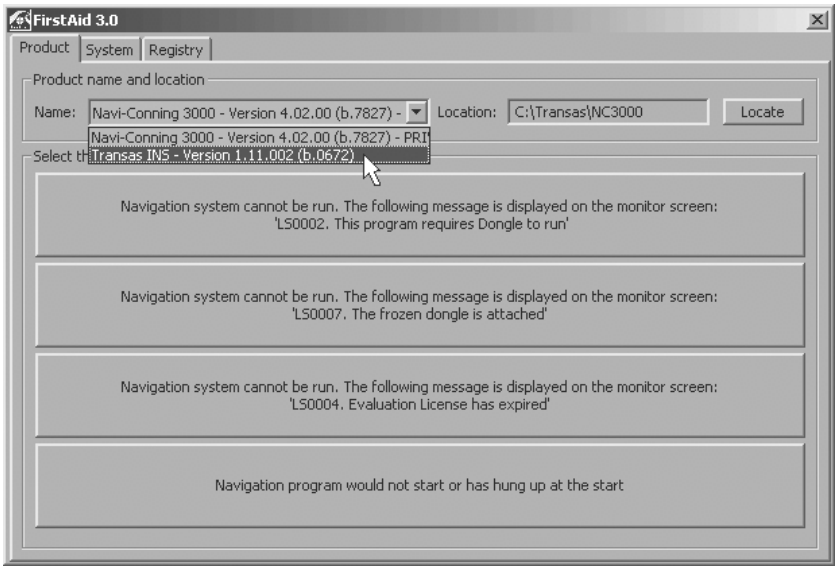
Press the button for run First Aid utility.



After the utility is run the screen displays a control window.


FirstAid 3.0
Product
System
Registry
Product name and location
Name:
Transas INS - Version 1.11.002 (b.0672)
Location:
C:\Transas\IBS\
Locate
Select the trouble you have faced with...
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0002. This program requires Dongle to run'
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0007. The frozen dongle is attached'
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0004. Evaluation License has expired'
Navigation program would not start or has hung up at the start

On “Product” page in Name input window press button and select the necessary product.


FirstAid 3.0
Product
System
Registry
Product name and location
Name:
Navi-Conning 3000 - Version 4.02.00 (b.7827) -
Location:
C:\Transas\NC3000
Locate
Navi-Conning 3000 - Version 4.02.00 (b.7827) - PRI
Transas INS - Version 1.11.002 (b.0672)
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0002. This program requires Dongle to run'
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0007. The frozen dongle is attached'
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0004. Evaluation License has expired'
Navigation program would not start or has hung up at the start

To exit from the First Aid utility press button on the top right corner of the “First Aid” window.

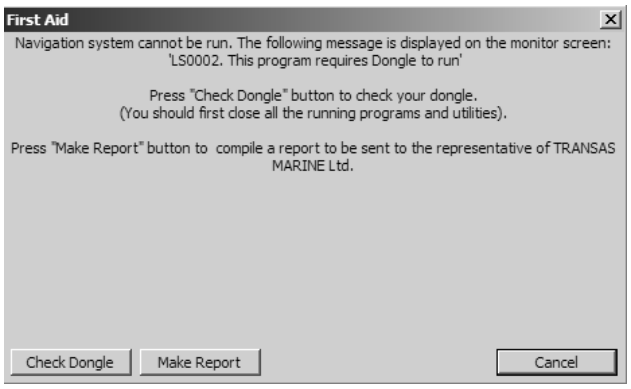
The program will be closed.

Elimination of Typical Faults

Start First Aid utility and press the button whose name corresponds to this fault.

Elimination of Faults Caused by the Breaking of the Dongle

Press Navigation system cannot be run. The following message is displayed on the monitor screen: “LS0002. This program requires Dongle to run” button:


First Aid
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0002. This program requires Dongle to run'
Press "Check Dongle" button to check your dongle.
(You should first close all the running programs and utilities).
Press "Make Report" button to compile a report to be sent to the representative of TRANSAS MARINE Ltd.
Check Dongle
Make Report
Cancel

Press Check Dongle button. In this case, there may be the following options of the dongle check results:

- dongle driver is not installed;

First Aid
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0002. This program requires Dongle to run'
Dongle is not found.
Sentinel SuperPro device driver is not properly installed.
If the type of your dongle is Sentinel SuperPro then Install Sentinel SuperPro driver, restart your PC and start this program again.
For information about installation of Sentinel SuperPro driver see technical documentation.
If the type of your dongle is Guardant Stealth then
1. Make sure you have attached Transas Marine dongle to your PC LPT port (or USB) and press Check again.
2. If the previous action has not helped, restart your PC and start this program again.
3. If this has not solved the problem, your dongle is probably corrupted. Contact Transas
Check Dongle
Make Report
Cancel

- dongle is not found;

First Aid
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0002. This program requires Dongle to run'
Dongle is not found.
1. Make sure you have attached Transas Marine dongle to your PC LPT port (or USB) and press Check again.
2. If the previous action has not helped, restart your PC and start this program again.
3. If this has not solved the problem, your dongle is probably corrupted. Contact Transas Marine (or its distributor) and change your corrupted dongle for a correct one.
Check Dongle
Make Report
Cancel

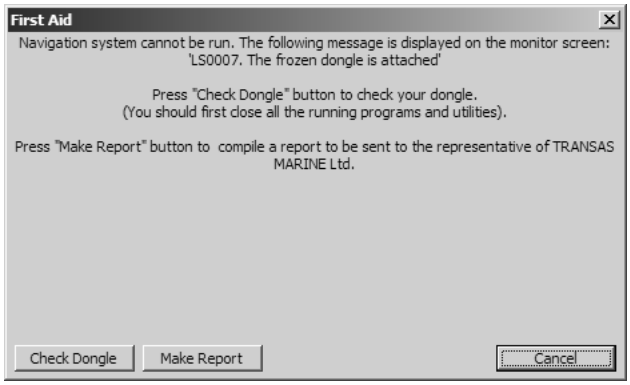
- some errors found in the dongle.

First Aid
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0002. This program requires Dongle to run'
Sorry, your dongle is corrupted. You cannot use it to run your Transas Marine product
Contact Transas Marine (or its distributor) and change your corrupted dongle for a correct one.
Check Dongle
Make Report
Cancel

In these cases, it is necessary to follow the utility's recommendations. The procedure of drawing the troubleshooting report is detailed below.

Activation of “Frozen” Dongle

Press Navigation system cannot be run. The following message is displayed on the monitor screen: “LS0007. The frozen dongle is attached” button:


First Aid
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0007. The frozen dongle is attached'
Press "Check Dongle" button to check your dongle.
(You should first close all the running programs and utilities).
Press "Make Report" button to compile a report to be sent to the representative of TRANSAS MARINE Ltd.
Check Dongle
Make Report
Cancel

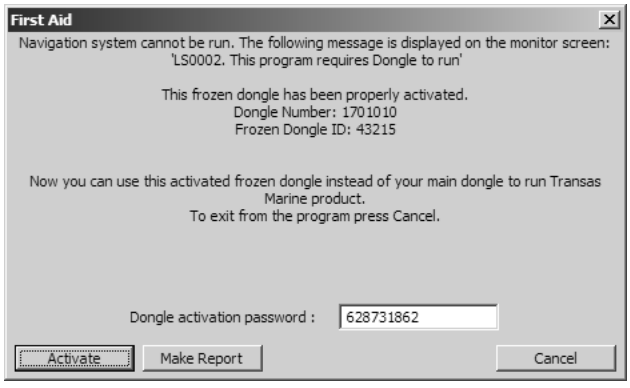
Press Check Dongle button.

First Aid
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0002. This program requires Dongle to run'
There are no errors detected on dongle.
Dongle Number: 1701010
Frozen Dongle ID: 43215
To use this frozen dongle you must ACTIVATE it.
To acivate this frozen Dongle please:
1. Send frozen dongle ID (43215) to Transas Marine (or its distributor);
2. Receive Activation Password from Transas;
3. Enter the received password in textbox below and then press Activate.
Dongle activation password :
Activate
Make Report
Cancel

Enter the “frozen” dongle activation password.

First Aid
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0002. This program requires Dongle to run'
There are no errors detected on dongle.
Dongle Number: 1701010
Frozen Dongle ID: 43215
To use this frozen dongle you must ACTIVATE it.
To acivate this frozen Dongle please:
1. Send frozen dongle ID (43215) to Transas Marine (or its distributor);
2. Receive Activation Password from Transas;
3. Enter the received password in textbox below and then press Activate.
Dongle activation password : 628731862
Activate
Make Report
Cancel

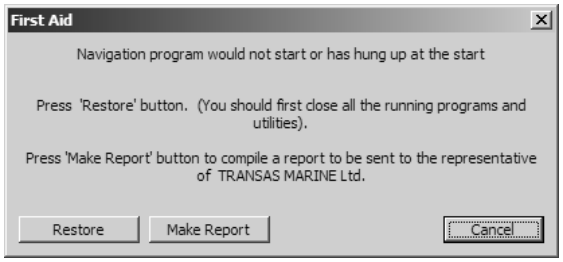
Activate the dongle by pressing Activate button.


First Aid
Navigation system cannot be run. The following message is displayed on the monitor screen:
'LS0002. This program requires Dongle to run'
This frozen dongle has been properly activated.
Dongle Number: 1701010
Frozen Dongle ID: 43215
Now you can use this activated frozen dongle instead of your main dongle to run Transas Marine product.
To exit from the program press Cancel.
Dongle activation password : 628731862
Activate
Make Report
Cancel

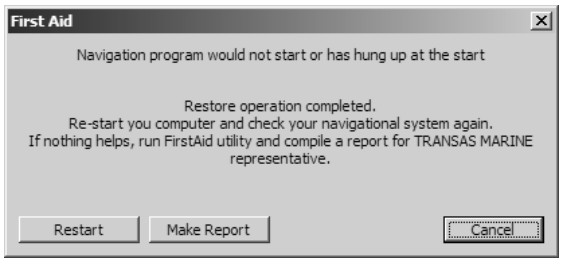
The dongle activation is completed. Close First Aid utility and go on with your work with the INS tasks.

Hang-Up or Impossible to Start the INS

Press Navigation program would not start or hung up at the start button:


First Aid
Navigation program would not start or has hung up at the start
Press 'Restore' button. (You should first close all the running programs and utilities).
Press 'Make Report' button to compile a report to be sent to the representative of TRANSAS MARINE Ltd.
Restore
Make Report
Cancel

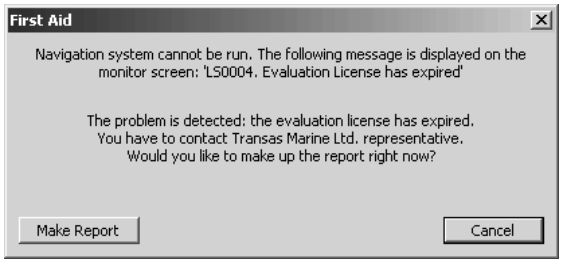
Press Restore button. The utility will perform the procedure for the recovery of the INS system standard configuration if the procedure for making a backup copy of the INS standard configuration.


First Aid
Navigation program would not start or has hung up at the start
Restore operation completed.
Re-start you computer and check your navigational system again.
If nothing helps, run FirstAid utility and compile a report for TRANSAS MARINE representative.
Restart
Make Report
Cancel

Press Restart button. If the fault has not been eliminated, perform the procedure for drawing a troubleshooting report.

Evaluation License Expired

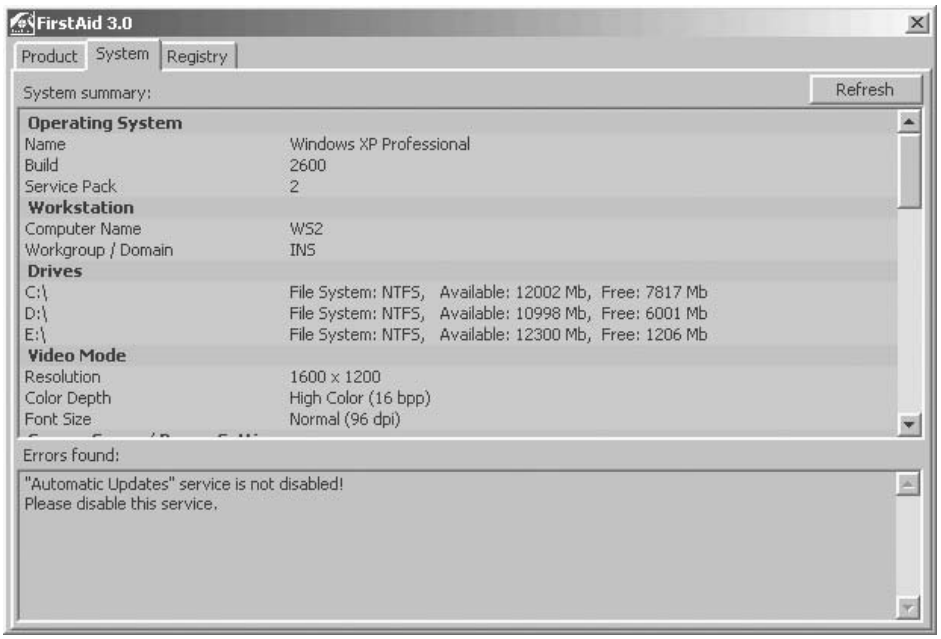
Press Navigation system cannot be run. The following message is displayed on the monitor screen: “LS0004. Evaluation License has expired” button:


First Aid
Navigation system cannot be run. The following message is displayed on the monitor screen: 'LS0004. Evaluation License has expired'
The problem is detected: the evaluation license has expired.
You have to contact Transas Marine Ltd. representative.
Would you like to make up the report right now?
Make Report
Cancel

Go on to the procedure for drawing the troubleshooting report (see below).

Check of OS Settings

Start First Aid utility and after the utility is run select “System” page:



The program checks the OS settings. There is no check of Microsoft Internet Explorer program version. If any incorrect settings are identified, the utility highlights them with red colour and provides recommendations for eliminating.

Note: In absence of network configuration, utility’s recommendations connected with the network settings should be ignored.

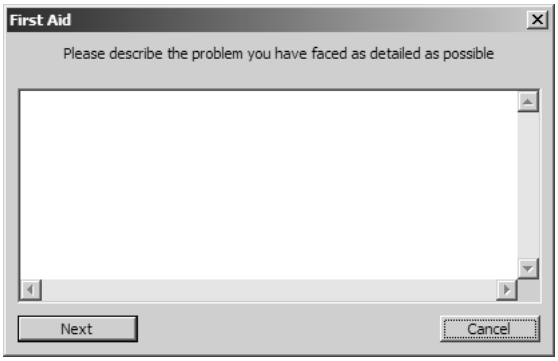
DRAWING OF TROUBLESHOOTING REPORT

To switch to the procedure for drawing the troubleshooting report, press Make Report button in the bottom part of the utility windows containing recommendations for eliminating faults if this operation is available at this stage.

The utility prepares necessary data for the archiving:

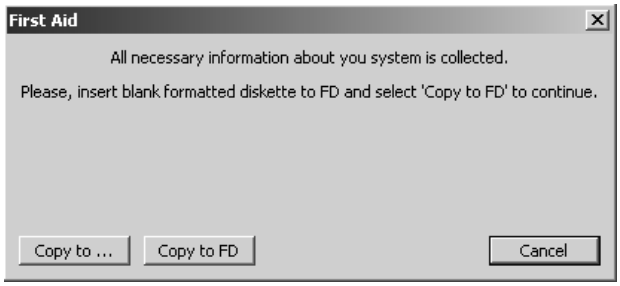
The utility starts collecting information on the system settings:

Enter the description of the problem as required:



Press “Next” button.

The utility can finish collection of all the necessary information. Save the troubleshooting report onto a diskette to be sent to the company:


First Aid
All necessary information about you system is collected.
Please, insert blank formatted diskette to FD and select 'Copy to FD' to continue.
Copy to ...
Copy to FD
Cancel

Press Copy to FD button.

The procedure of drawing the troubleshooting report is completed:

FirstAid
Congratulations, you have just copied all necessary files !!!
After copying the required stuff onto the floppy disk, add additional data via Data Tool utility, which could help for the investigations (e.g., screen-shots, routes, Add Info files, etc.)
OK

Press “OK” button to close the window.

HOW TO SEND A REQUEST FOR REPAIRS

If you have not succeeded in eliminating the fault by using the procedures described above, you should send a notification on failure. You should send the following information IN WRITING to the company in any way possible:

1. TO: Ship Agent address.
2. CC: Transas Ltd.

Fax: see www.transas.com\support (local area distributor).

E-mail: see www.transas.com\support (local area distributor).

PLEASE ARRANGE SERVICE VIA Transas Ltd. AS FOLLOWS:

SHIP'S NAME:

SHIP'S OWNER:

NAME OF EQUIPMENT (HARDWARE IN USE):

SERIAL NUMBER:

DONGLE NUMBER:

DATE OF COMISSIONING: (in accordance with installation report).

DESCRIPTION OF FAULT: diskette with information collected with the use of First Aid utility.

ETA/ETD (DATE, PORT): name of the port and estimated dates and time of arrival and departure.

WARNING!

No request for warranty/service repair drawn in an arbitrary form, or a verbal request will be taken into account.

CHAPTER 7

Description of SPOS Utility

This chapter contains a description of the utility which allows reception and processing of weather forecasts used by the Transas INS.

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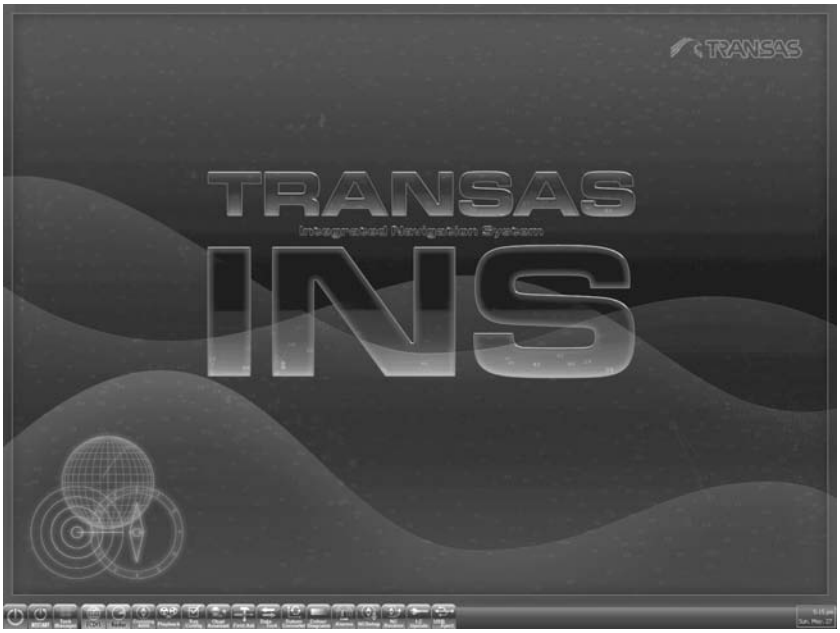
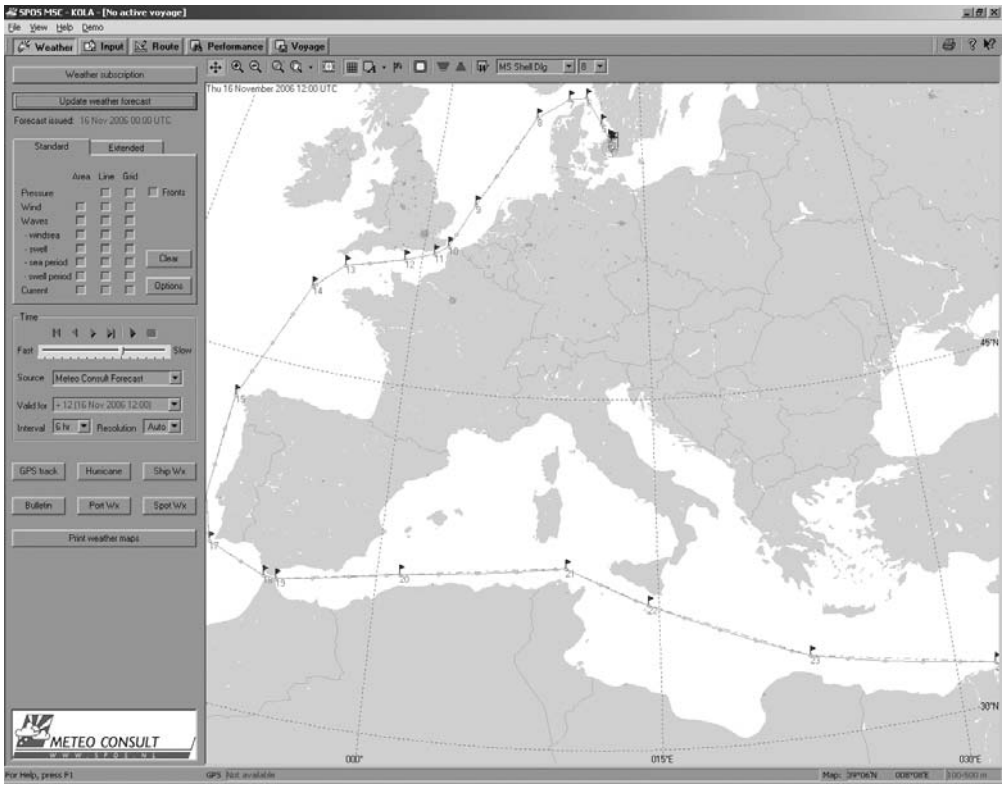
WEATHER FORECAST SUBSCRIPTION

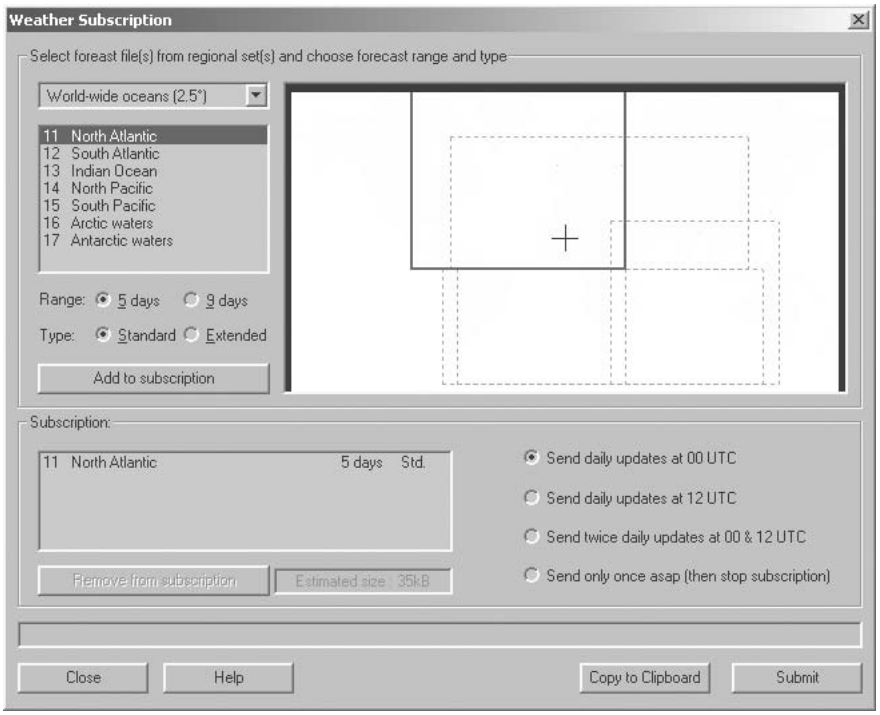
Press button for run SPOS utility.



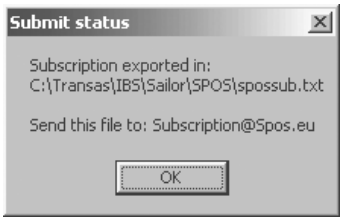
After the utility is run the screen displays a control window:



On “Weather” page press button Weather Subscription. In the opened window select the region(s) of the weather forecast coverage and frequency of the forecast update. Several regions are available for selection depending on the sailing area.

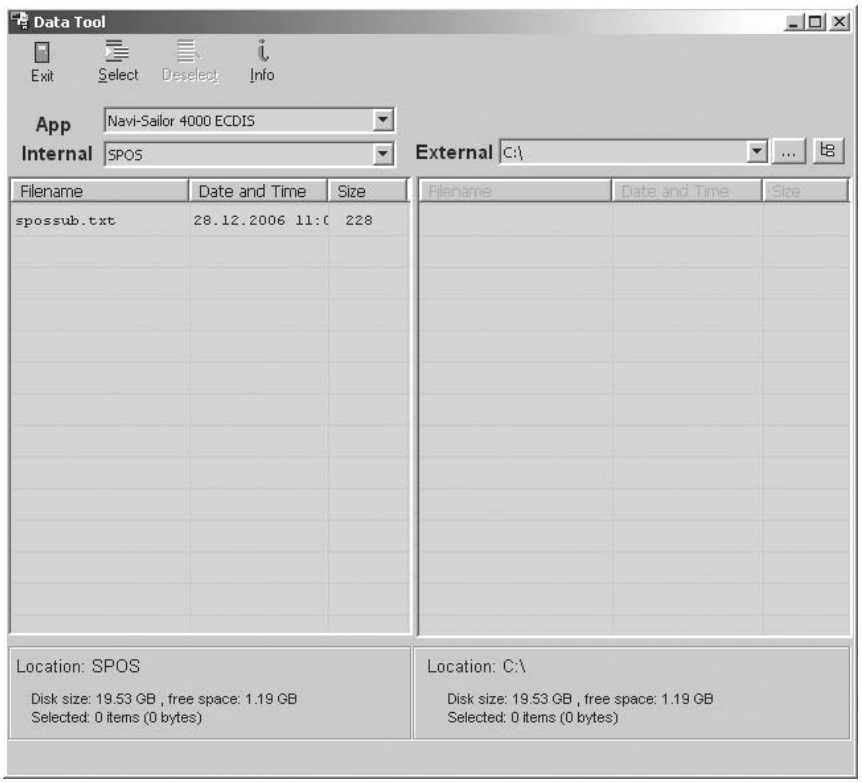


Press Submit button. The following dialog box will be displayed.



Press “OK” button. The subscription request `spossub.txt` will be saved in the `SPOS` folder in the INS root directory (*C:\Transas\IBS\Sailor\SPOS\spossub.txt*).

Run Data Tool utility, select internal SPOS group.

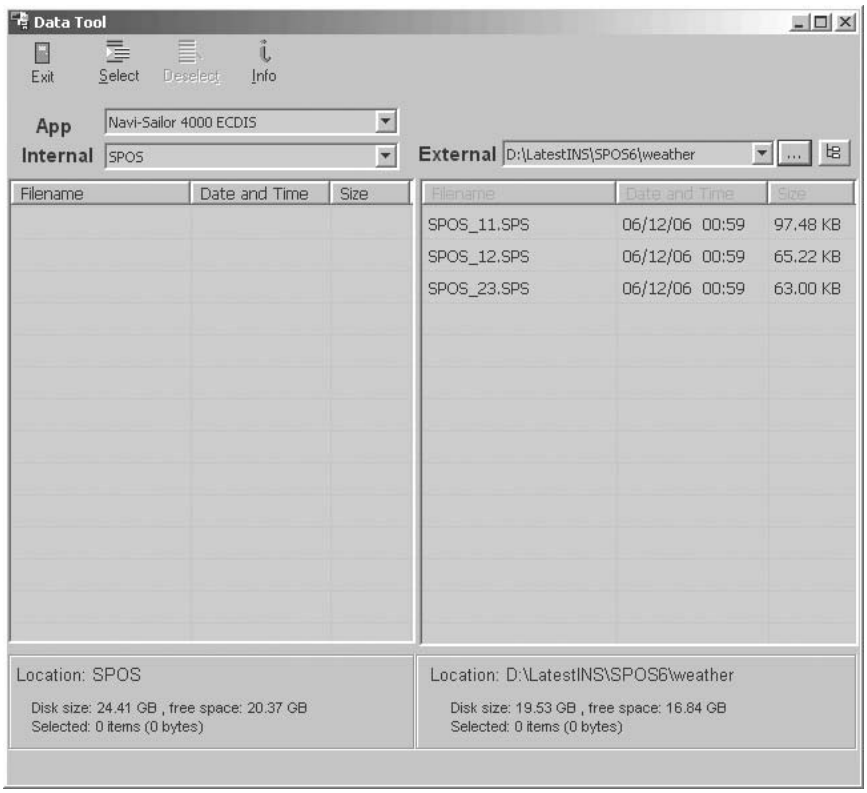


Copy the file onto the external carrier (floppy disc) by means of Data Tool utility. Send this file to the e-mail address: Subscription@Spos.eu from the ship's communication workstation.

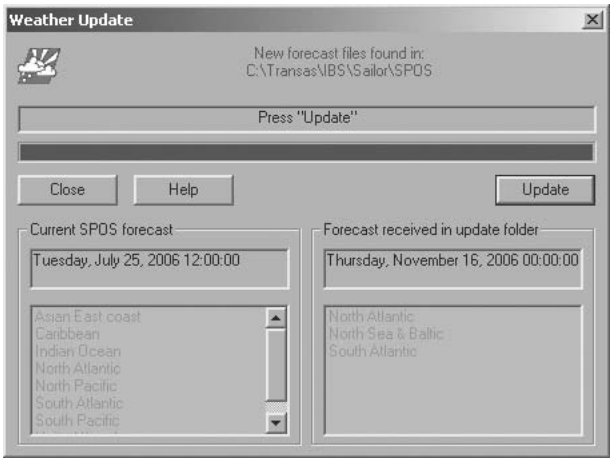
WEATHER FORECAST UPDATE

Weather forecast update will be delivered onboard via ship's communication workstation with frequency specified in subscription message (see above).
After receiving the update, the files with extension `*.sps` will be saved in the ship's e-mail client inbox. Copy these files onto the external data carrier (FDD, USB Flash Drive, etc), and then put the disc into floppy drive of the INS workstation.

Run Data Tool utility and open internal group "SPOS". Select the above-mentioned data carrier as external group. Copy `*.sps` files into the internal group "SPOS".
The files will be saved into the folder *C:\Transas\IBS\Sailor\SPOS*.



Run the SPOS program. On the "Weather" page press the button Update Weather Forecast. The window "Weather Update" with notification "New Forecast found" will be displayed. Press Update button.

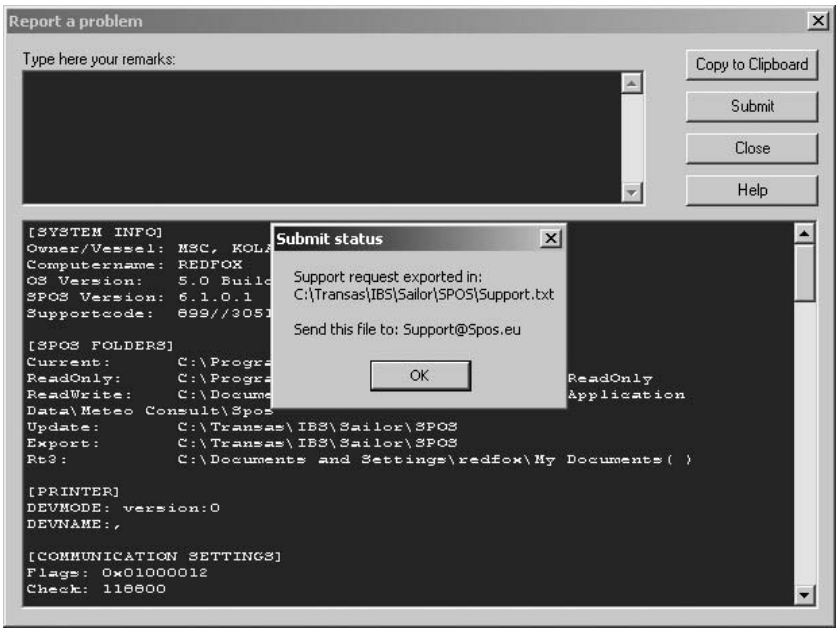


Press "OK" button. Update of weather forecast is completed.

REPORT THE PROBLEM

In the case of facing the problems in work with SPOS program, the respective report is to be created as follows:

- on the HELP menu select REPORT PROBLEM line. All necessary information will be collected by the program. Press Submit button; the file `Support.txt` will be created in the folder *C:\Transas\IBS\Sailor\SPOS*. Confirm the file creation by pressing “OK” button in the appropriate dialog box:

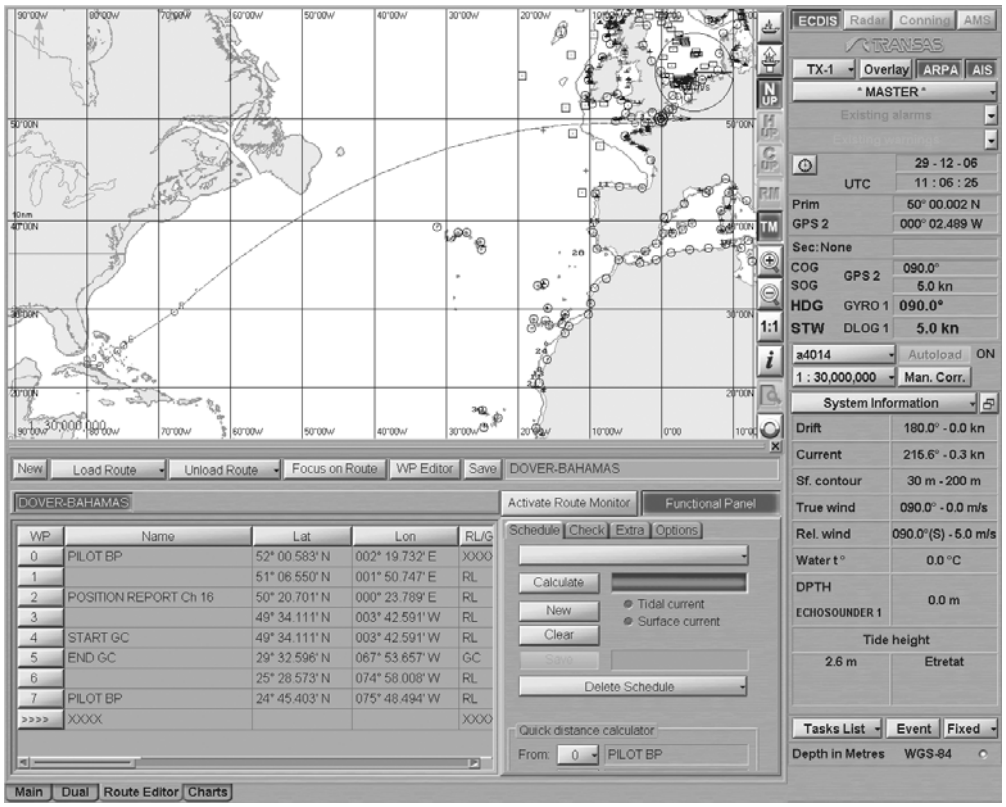


- run Data Tool utility. Open internal group “SPOS”. The file `Support.txt` will be displayed in the above mentioned group. Handle the file by means of Data Tool utility and send it to the e-mail address: Support@spos.eu via ship’s communication workstation.

ROUTES EXCHANGE

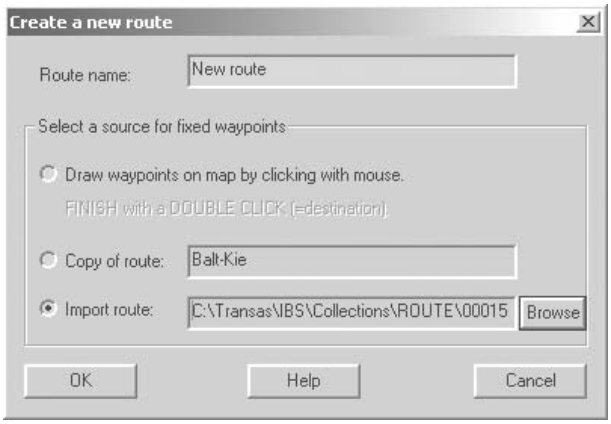
The SPOS program is capable to exchange routes with the ECDIS task as well as to process the routes created in the ECDIS task taking the weather conditions into account.

Run the ECDIS task. Switch to the “Route Editor” panel and create a new route.



Save the created route by pressing the Save button.

Run the SPOS program. Open the “Input” page. In the field Routes templates press the New button. The window “Create a new route” will be displayed.



Check the Import route checkbox. Press “Browse” button and select a new route created in the ECDIS task in the ROUTE folder (*C:\ROUTE\ROUTE* see document TRANSAS INS (V. 1.11.002). INSTALLATION GUIDE, chapter System Settings, section SPOS Weather Module Installation, paragraph Meteo Consult Module Settings). Press the “OK” button.

Specify the ETD (UTC) from the first waypoint, average ship's speed during the voyage and time period between intermediate waypoints.

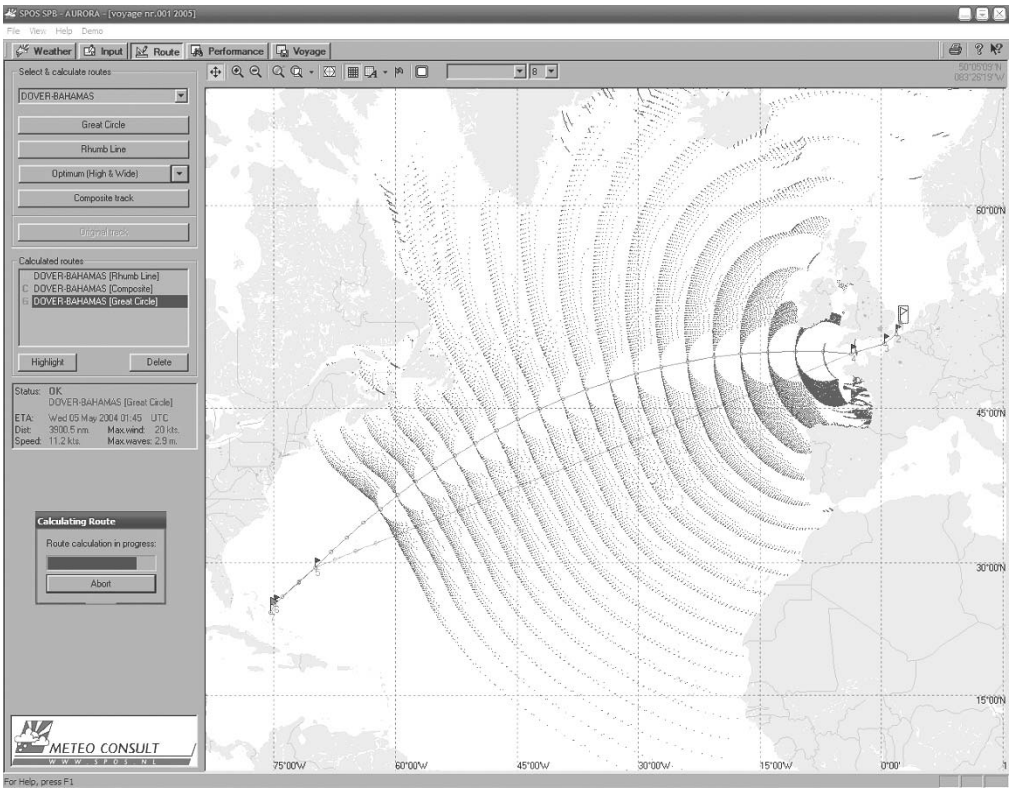
Open the page "Route". Select the required route from the fall-off list in Select & calculate routes group. Proceed with voyage parameters calculation by pressing the respective buttons in accordance with selected calculation method:

- the program calculates the route on the base of waypoints created in the ECDIS task as a Great Circle sailing for all the route legs taking the weather conditions into account;

- the program calculates the route on the base of waypoints created in the ECDIS task as a Rhumb Line sailing for all the route legs taking the weather conditions into account;

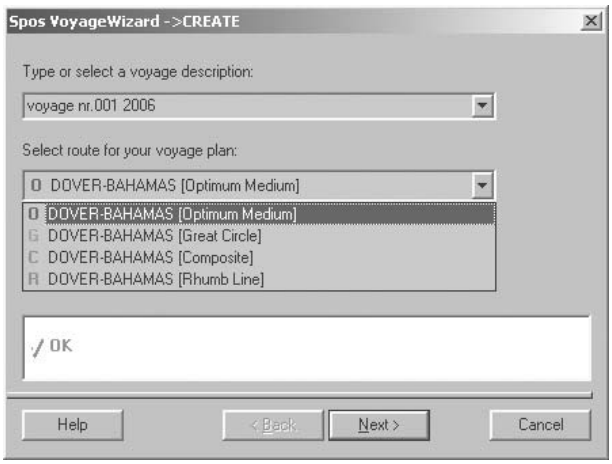
- the program calculates the route on the base of waypoints created in the ECDIS task as a combination of Great Circle and Rhumb Line sailing as was set in the ECDIS task Route Table taking the weather conditions into account;

- the program calculates the optimum route taking the weather conditions into account; the optimum route will include the waypoints created in the ECDIS task as well as intermediate waypoints created by the SPOS program as set in the Input page; for details see SPOS MANUAL & REFERENCE GUIDE.

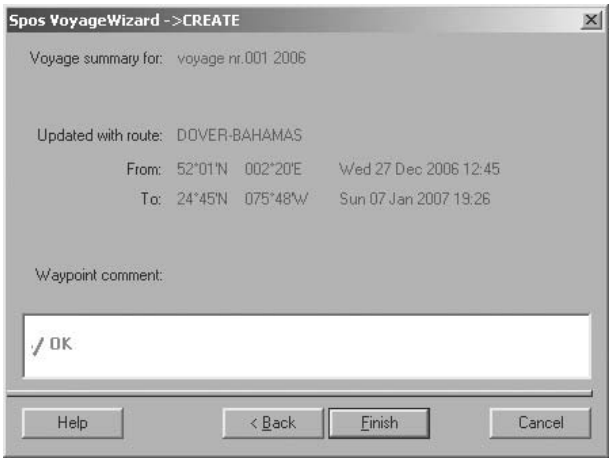


Results of calculation are available for displaying by selection the appropriate route in the Calculated routes field. These results contain the following parameters: ETA to the last waypoint (UTC), route distance, average ship's speed during the voyage and maximum values of wind force and wave's height.

Open the page “Voyage”. Press Create voyage plan button.



In the opened window select the required route from the fall-off list. Press the “Next” button.



The voyage summary will be displayed in the opened window. Press the “Finish” button. The voyage will be automatically saved into the ROUTE folder.

In running ECDIS task select panel “Route Editor” and press Load Route button. The voyage created in SPOS program will be displayed in the fall-off list with the name #SPOS#.

ATTENTION!

It is recommended to rename and save the route #SPOS# immediately after importing from the SPOS program. The ROUTE folder of ECDIS task may contain only one route named #SPOS#. The next voyage created by the SPOS program will be imported to the ROUTE folder with the name #SPOS# and, therefore, will overwrite existent route of the same name.

The route imported from the SPOS program will contain the route time schedule with forecasted weather conditions taken into account.

Note: The routes calculated in the SPOS program by pressing the buttons “Great Circle”, “Rhumb line” and “Composite” will contain original waypoints created in the ECDIS task only; their names and coordinates will not be changed. Routes calculated by pressing the button “Optimum” will contain the above mentioned waypoints plus intermediate waypoints created by the SPOS program during calculation. These waypoints will be named “(sposxx)”.

CHAPTER 8

License Update Wizard

This chapter contains a description of the license renewal procedure in the Transas INS.

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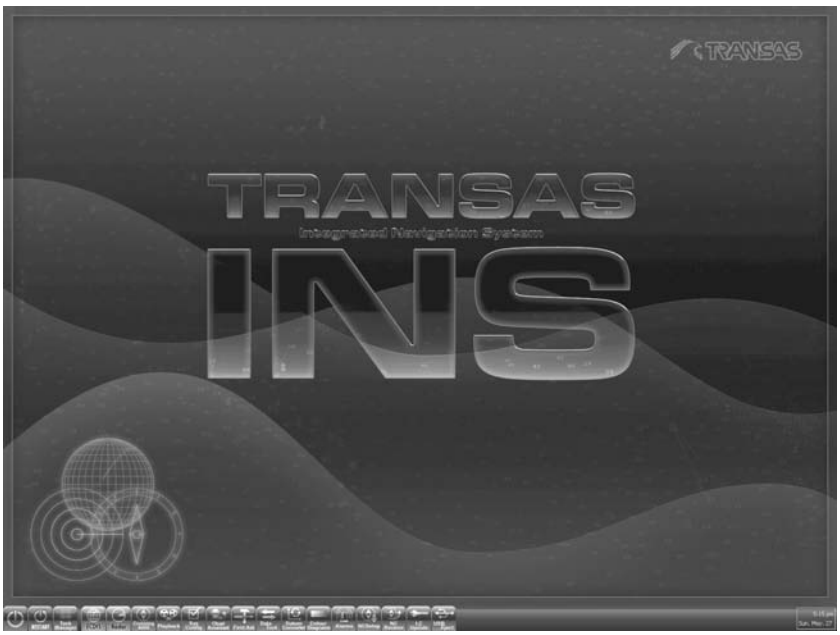
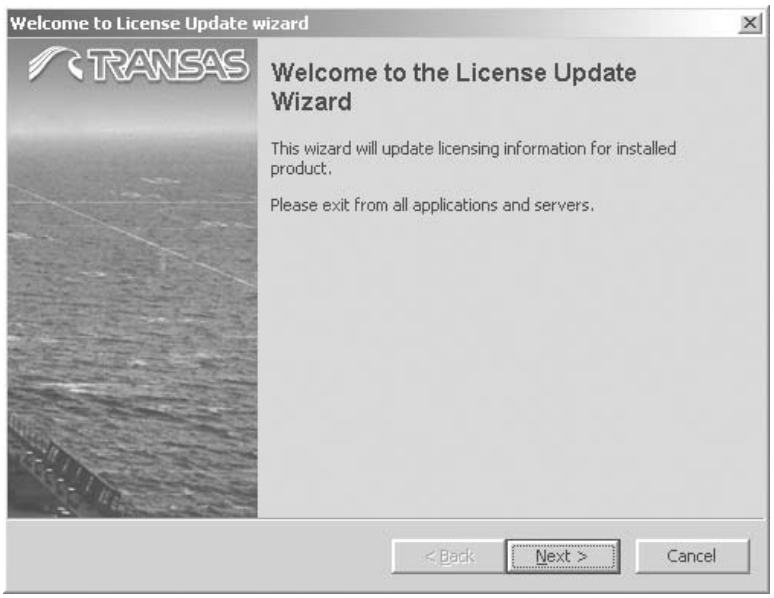
ATTENTION!

License is required to be replaced on each WS.

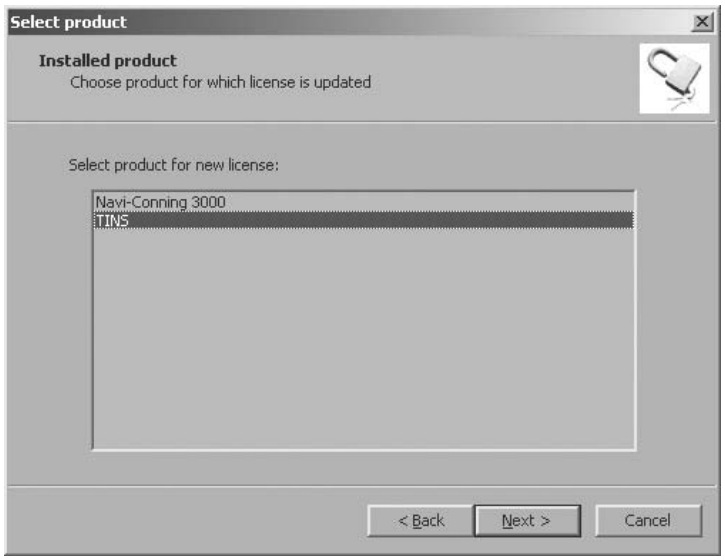
Press button for run License Update wizard.



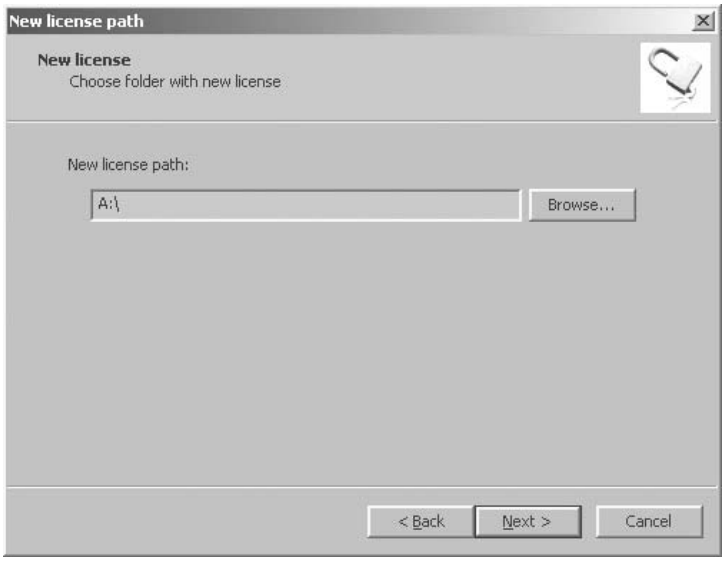
Press “Next >” button.


Welcome to License Update wizard
TRANSAS
Welcome to the License Update Wizard
This wizard will update licensing information for installed product.
Please exit from all applications and servers.
< Back
Next >
Cancel

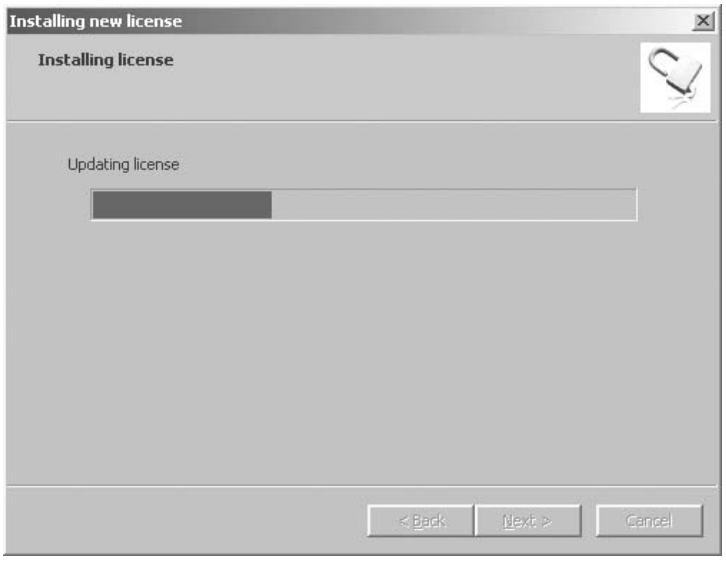
Select the product which the license is renewed for.



Specify the path to the product license. Press “Next >” button.



The program will perform the product installation.



Press “Finish” button.

The license update is completed.